

SCHOOL MANAGEMENT

October 1959

PRACTICAL SOLUTIONS TO SCHOOL MANAGEMENT PROBLEMS

DOES YOUR SCHOOL DISTRICT NEED
A BUSINESS MANAGER?

THE FACTS

ABOUT

MODULAR

CONSTRUCTION

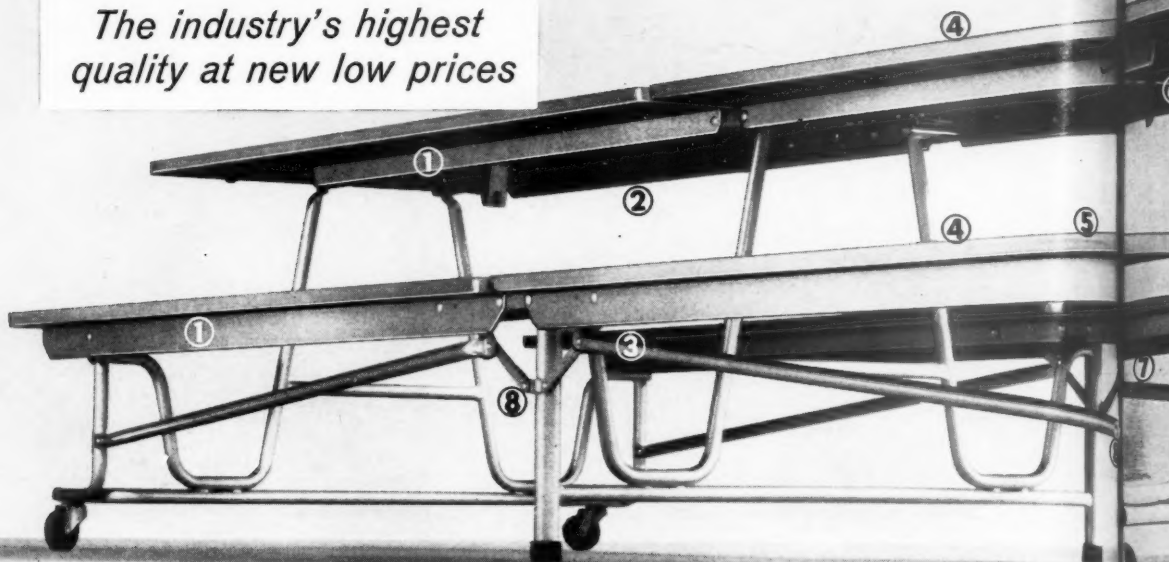
HOW YOUR DISTRICT CAN

SEND A STUDENT ABROAD



SEE COMPLETE CONTENTS ON PAGE 3

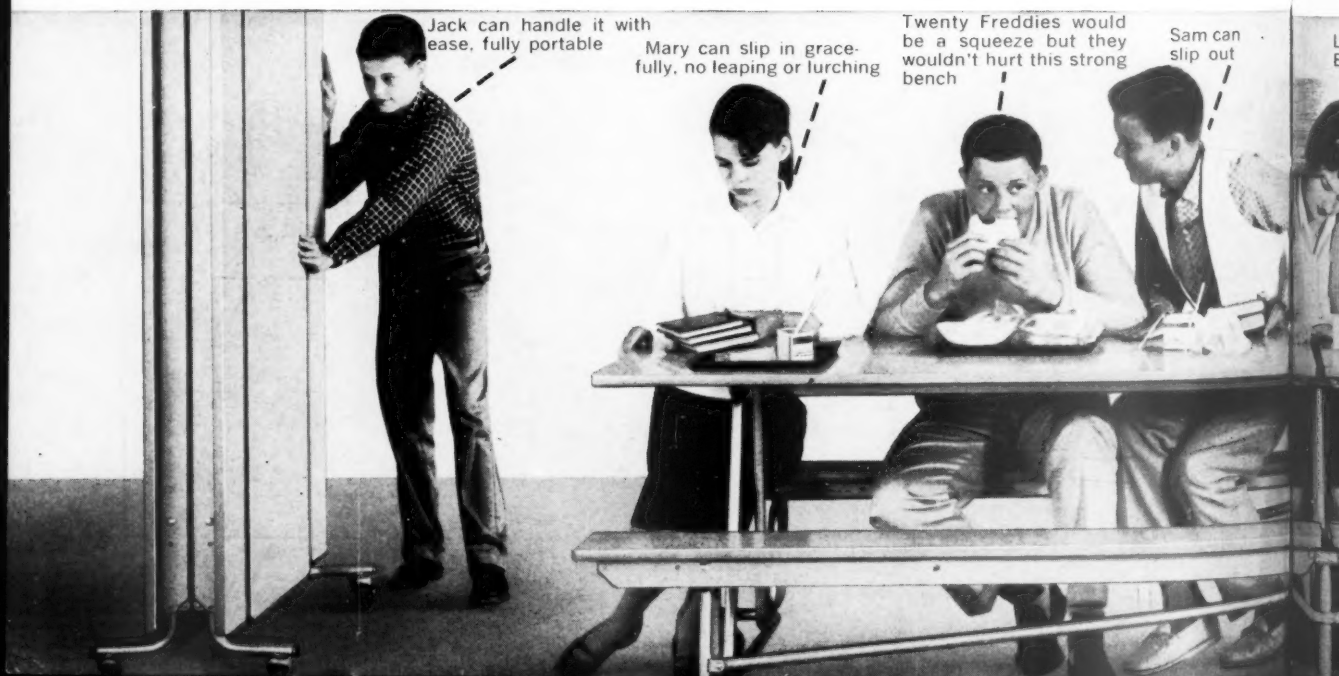
*The industry's highest
quality at new low prices*

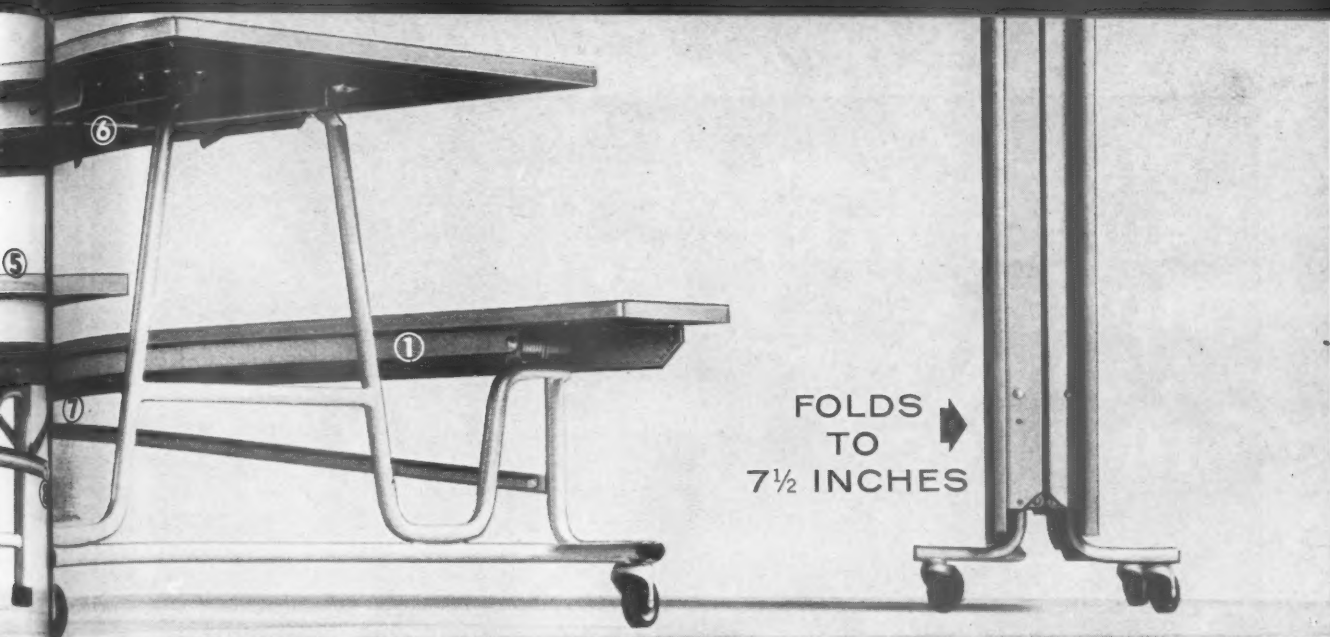


This is the new Erickson one-fold Table *No other line of tables offers so much at such a low price*

Look underneath: 1. Two steel channels under each bench and the table top, an Erickson exclusive 2. Rugged, simple understructure, no unsightly knobs or projections to bump or tear 3. Torsion and compression springing for one-step controlled folding and unfolding 4. Bonded high pressure NEMA plastic tops and benches with $\frac{3}{4}$ " solid core material 5. Sanitary benches never touch table tops 6. Position locks—no teeter-totter when extended, no "surprise" openings when folded 7. Walk-in ends, nothing to hurdle 8. Pivot points in metal, can't pull out.

Here's what it will take, daily





50 models from which to choose

Even if other table lines had Erickson's features and unmistakable quality they still could not offer you Erickson's completeness. Choose the table or table combinations exactly right for you: 6 footers . . . 7, 8, 10, 12 footers . . . with benches . . . without benches . . . recess wall . . . on the wall . . . portable. Prices for genuine, high pressure NEMA plastic tops start at \$75.00. Others as low as \$45.00. Why pay more for less? Clip and mail coupon today for demonstration or full information.

See these wonderful new tables
at the ASBO, Booth 202, Oct. 11-15,
Hotel Fontainebleau

**HH HALDEMAN
HOMME •**

Manufacturing Company

2580 University Avenue
St. Paul 14, Minnesota

- ☐ Please send complete information on your new tables and prices.
- ☐ I would like a demonstration of Erickson quality tables.

Name _____

Title _____

Address _____

City _____ Zone _____ State _____

(Circle number 718 for more information)



HIS PUPILS WENT HOME A LONG TIME AGO



Busy teachers have more time to teach, more time to prepare their next day's work when such clerical tasks as report card writing are performed by IBM Data Processing. Now, without buying a single additional machine, schools once thought too small for high-speed data processing are getting mechanization benefits through The Service Bureau Corporation (SBC), a subsidiary of IBM.

Report cards in 2 days. For example, one high school 231 miles away from the nearest SBC office receives finished machine-prepared report cards 2 days after sending in their quarterly grades. Before this punched card system was adopted, teachers spent 20 to 30 minutes of each class period on report card day preparing grade reports. Now all of this work is done **outside** the classroom in much less time. Multiple copies for office and counselor use, permanent record posting, student rosters, class rolls, incomplete grade listings are some of the valuable by-products of the system, and class scheduling now is much faster and more accurate than before.

Payroll no longer a bottleneck. In another case, a central school district with 425 teachers turned its entire payroll accounting over to SBC. Results include a complete payroll register, separate deduction register, checks and detailed earnings statements, and a budget analysis. By-product quarterly and annual tax reports are no longer a bottleneck.

Worth looking into. Whether you are concerned with the accounting problems of a school or a whole school system—and whether your accounting needs are large or small—find out about this modern approach to clerical work. Just call your local SBC office. Chances are there's one near you. (It is very likely that it will be well worth your while.)



The
Service Bureau
Corporation
A Subsidiary of IBM
425 Park Avenue
New York 22, New York
83 offices from coast to coast

Contents for October 1959

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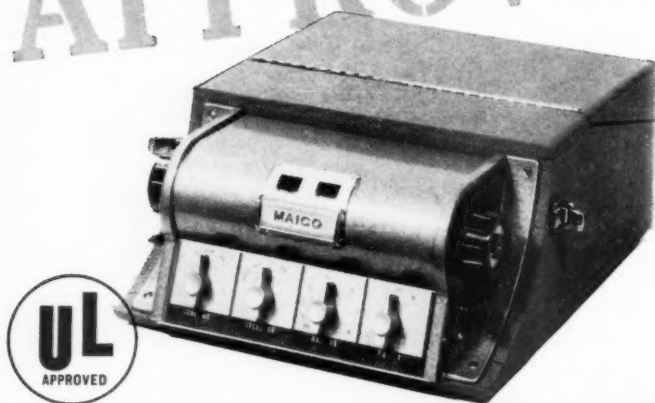
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Now! Conduct School Hearing Tests
with the
UNDERWRITERS LABORATORIES

APPROVED



MAICO
MA-2 PORTABLE
Audiometer



Easily carried from
school to school

If you help in setting up audiometer bids and purchase-specifications for school audiometers, remember this important point: Specify **UNDERWRITERS LABORATORIES APPROVED**.

Here's Why Maico's MA-2 Is the World's Most Accepted PORTABLE AUDIOMETER

- UL APPROVED** safe construction!
- LIGHTWEIGHT**, as easily carried as a typewriter!
- TWIN INTERRUPTERS** allow operator to interrupt tone unseen; with either hand!
- LIGHTED DIALS** for fast, easy reading!
- LATERAL CONTROLS** for natural, restful operation!
- AUTOMATIC MUTING** between frequencies!
- TESTS UP TO 40 CHILDREN** at one time by using group testing headsets!
- BIG STORAGE COMPARTMENT** for accessories, records!
- RUGGED CARRYING CASE** with long-life cover!

Write for **FREE BOOKLET**
"WHY and HOW to conduct school hearing tests"
MAICO ELECTRONICS, INC. ROOM 122X
21 North Third Street, Minneapolis 1, Minnesota

NAME _____
ADDRESS _____
CITY _____ STATE _____

(Circle number 733 for more information)

**SCHOOL
MANAGEMENT**

22 West Putnam Ave., Greenwich, Conn.

Volume 3

Number 10

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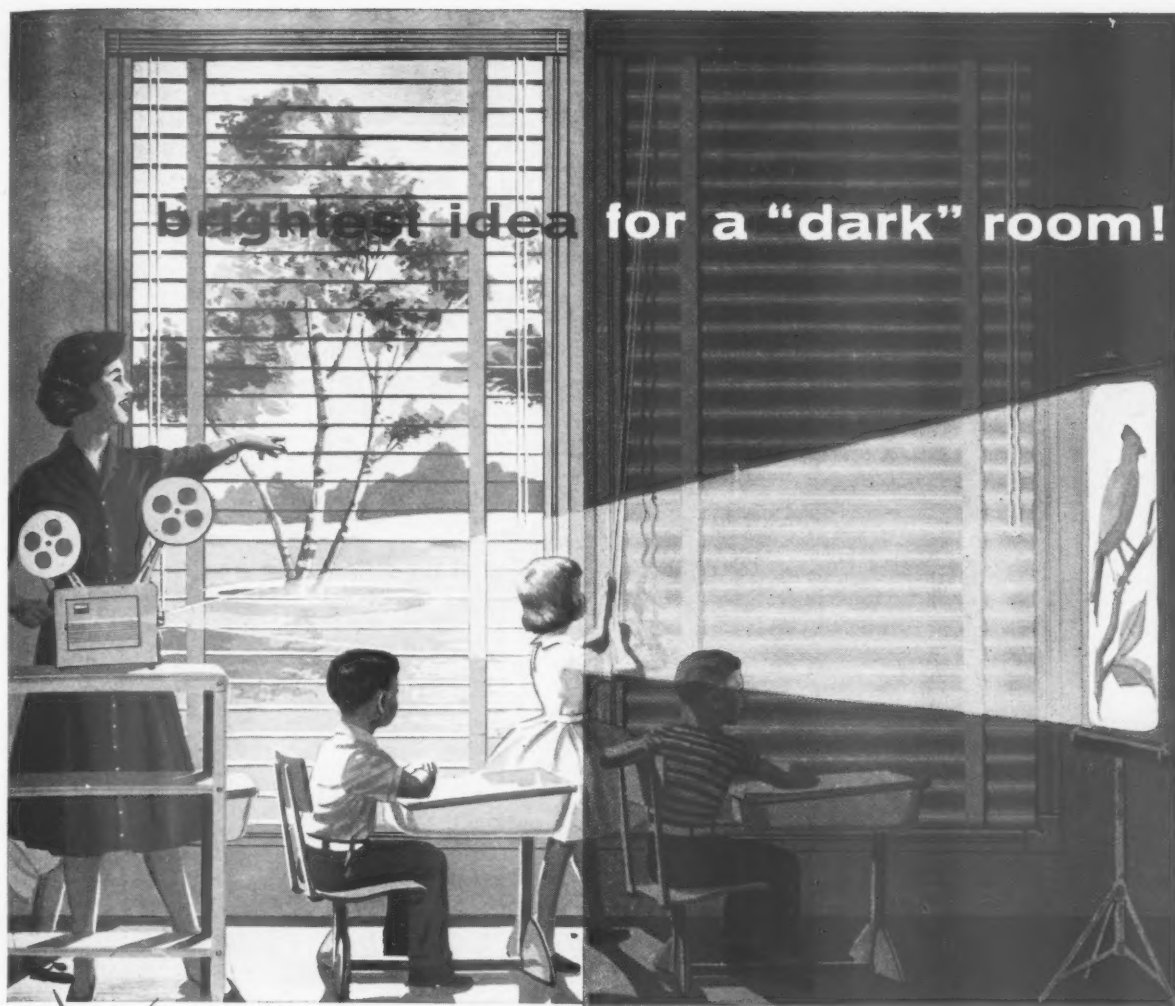


Member of Business
Publications Audit

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CHANGE OF ADDRESS: To insure continuous service, send your new address (and moving date) 45 days before moving.

Include old address as it appeared on previous issues (if possible send label from magazine). Do not depend on the post office to forward either the change of address or your magazines.



Eastern's Star **AUDIO-VISUAL VENETIAN BLINDS**

As more new schools are built . . . more Eastern's Star venetian blinds are built-in. The flick of a cord turns the brightest classroom into a dark projection room . . . to meet the most exacting requirements for audio-visual education. Stronger, wider "S"-shaped slats interlock when closed to turn day into night . . . open up for a clearer view, better-reading diffused light.

Also, every Eastern's Star slat has a protective coat of miraculous Du Pont "Ludox"* that never needs washing . . . cuts maintenance to an occasional dusting.

Send coupon for full details, today!

*Du Pont's registered trademark for its anti-soil compound.



the makers of Eastern Drapery Hardware

**... open wider,
close tighter,
never need washing!**

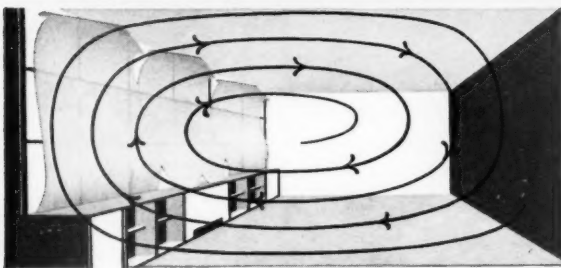
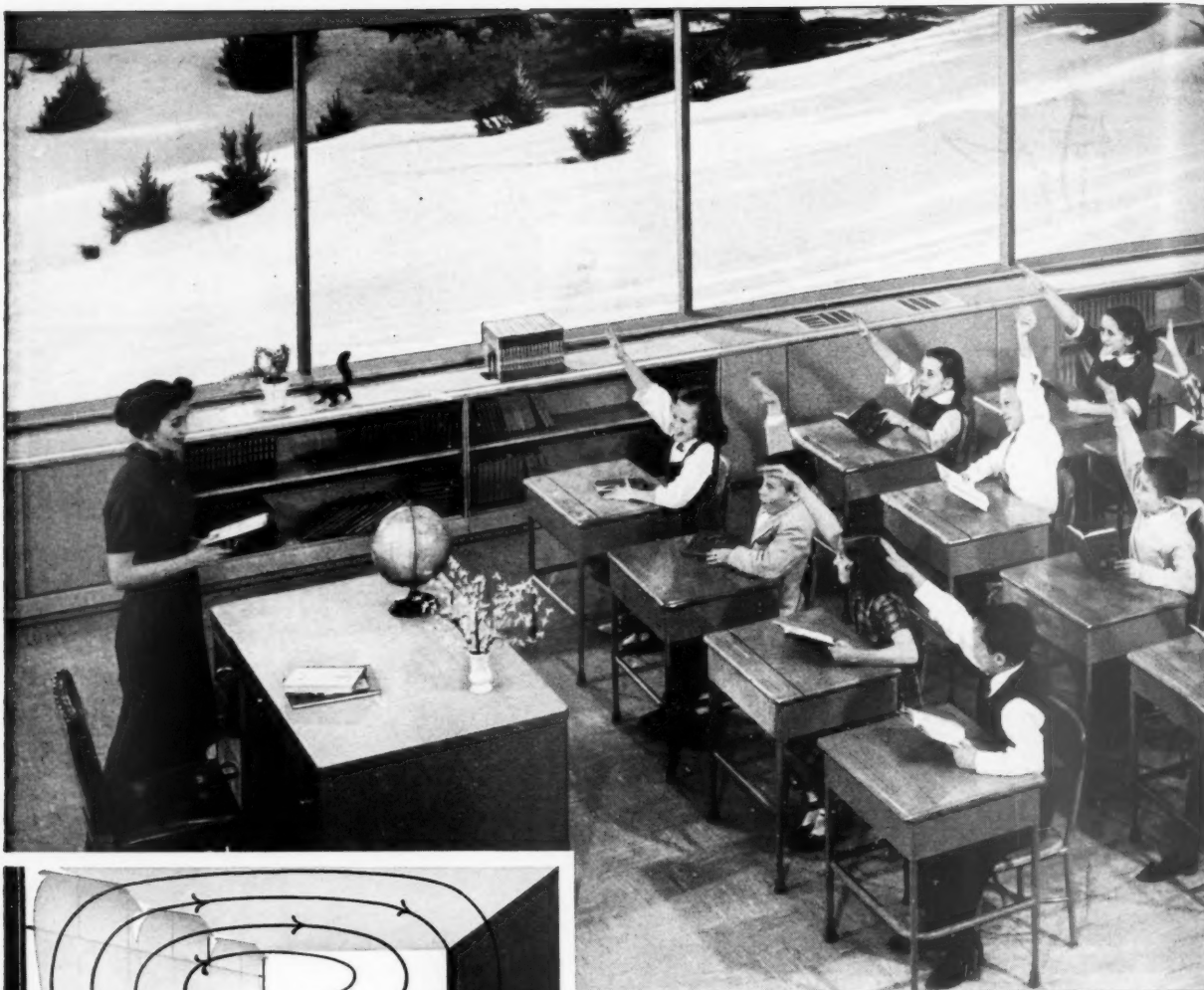
Eastern Products Corp., 1601 Wicomico St., Baltimore 30, Md.
 Please send full details on Eastern's Star Audio-Visual Venetian Blinds.

NAME _____

SCHOOL _____

ADDRESS _____

CITY _____



Continuous, room-wide ventilation! Only the TRANE Unit Ventilator system provides powered ventilation and warmth from *room-wide* outlets. Air from the unit rises, blends with room air, creates a gentle flow of tempered air,

...and only TRANE provides a single source for every school heating-ventilating need!



In gymnasiums and locker rooms, TRANE Torrivents heat and ventilate, blend in outside air in any desired proportion, gently warm the atmosphere.



In hallways and corridors, TRANE Wall-Line and Wall-Fin Convectors provide economical heating for long wall and window runs. Sizes for any job.



In entryways, TRANE Force-Flo Heaters greet pupils with warm welcome... blanket doors with a wall of tempered heat that blocks cold air, stops drafts.

Only Trane Unit Ventilators provide room-wide powered ventilation...all day long!

Exclusive Kinetic Barrier Action stops drafts, ends hot spots, cold spots, sleepy corners—every moment the classroom is occupied!

Here's the ideal climate for learning, for every pupil in the room no matter where he is seated. The TRANE Unit Ventilator with exclusive *Kinetic Barrier Action* provides room-wide powered ventilation all along the outer wall...ends costly over-heating, sleepy corners, stale air spots *every moment the classroom is occupied*.

Other Unit Ventilators with on-and-off draft preventing systems do not provide continuous downdraft protection. When their action is "off," there is no positive protection against chilling window down-

drafts. With the TRANE *Kinetic Barrier System*, a rising wall of moving air—warmed and tempered, blended with just the right amount of fresh outside air—provides *continuous wall-to-wall* downdraft protection... *continuous room-wide* air circulation all day long.

When you plan to build or remodel your school, have your architect, or consulting engineer talk to one of the nearby TRANE specialists in school heating-ventilating problems. Or write directly to TRANE, La Crosse, Wisconsin.

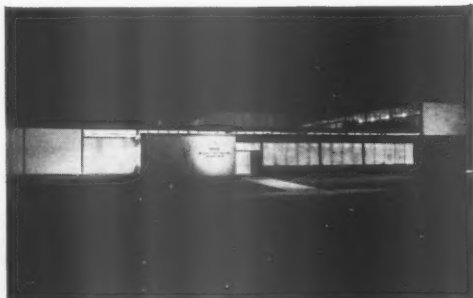
Before you decide on a heating-ventilating system, compare these TRANE features with any other system:

Superior engineering—The exclusive TRANE system provides a fresh air seat for every pupil in the room. Low fan speed, rubber isolated bearings, belt-driven, resilient-mounted motor for quiet operation.

Sturdy construction—Rugged casing takes hard knocks of classroom use. Dampers, coils and fans designed for long trouble-free life. Shelving and extensions are of heavy gauge steel.

Trim, modern appearance—The TRANE Unit Ventilator has been designed for the modern school. Two basic models, with nine cabinet styles will match any school requirement. Matching shelving units available in a wide choice of colors, with durable top surface.

Simplified, low-cost maintenance—All maintenance can be easily performed by school engineer. Easily removable panels provide access to all working parts. Fans are easy to clean, filters easy to change. Fan and motor bearings are easy to lubricate.



Equipment for schools is developed, tested, improved in this TRANE Research Laboratory, The House of Weather Magic—the largest, most complete laboratory for heating-ventilating products.

For any air condition, turn to

TRANE

MANUFACTURING ENGINEERS OF AIR
CONDITIONING, HEATING AND VENTILATING
EQUIPMENT FOR THE MODERN SCHOOL

THE TRANE COMPANY, LA CROSSE, WIS. • SCRANTON MFG. DIV., SCRANTON, PA. • CLARKSVILLE MFG. DIV., CLARKSVILLE, TENN. • TRANE COMPANY OF CANADA, LIMITED, TORONTO • 97 U.S. AND 19 CANADIAN OFFICES

(Circle number 754 for more information)

For music that instructs...inspires...entertains-



Better music in the classroom



Better music for band practice



Better music at the dance



Your school needs

THE HAMMOND ORGAN

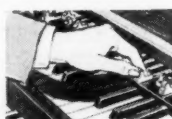
Choice of over 43,000 institutions

ONCE YOU HAVE the versatile Hammond Organ in your school, you'll wonder how you ever got along without it!

For you'll soon find the Hammond Organ is busy all day long—in the classrooms, auditorium, and gym . . . at dances, plays, and PTA nights—*anywhere* you need fine music.

Hammond Harmonic Tone Bars

And the music will sound better too. Why? Because Hammond's exclusive Harmonic Tone Bars provide thousands of beautiful tones and tonal combinations . . . tones no other organ can duplicate.



Anyone can play the Hammond Organ, and it's especially easy for those who play the piano. The Hammond

Organ is also portable—it goes anywhere, takes little space, plugs in like a lamp.

Never Needs Tuning*

As for upkeep, you'll never have any tuning expense—Hammond is the only organ that never goes out of tune.

Which Hammond model will be best for you? Find out by mailing one or all of the coupons below. Address Hammond Organ Company, 4231 W. Diversey Avenue, Chicago 39, Illinois.

*Except the Pedal Solo Unit of Concert Model.

To bring your school better music, mail these coupons . . .

- ☐ Please send me your booklet telling how my school can raise money for an organ.

Name _____
School _____
Address _____
City & Zone _____
State _____

SMA 10

- My school is interested in:
☐ Viewing a color film about the Hammond Organ.
☐ Hearing a free organ concert.

Name _____
School _____
Address _____
City & Zone _____
State _____

SMA 10

- ☐ Please send me complete literature describing the various models of the Hammond Organ.

Name _____
School _____
Address _____
City & Zone _____
State _____

© 1959, HAMMOND ORGAN COMPANY SMA 10

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SCHOOL MANAGEMENT

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YOURS FOR THE ASKING

These booklets—promotional and otherwise—contain ideas of possible value to you and your schools. Each item listed will be sent to you without cost.

FOR FREE COPIES, USE READER SERVICE CARD

Audio-visual. A list of the audio-visual materials available in science, modern foreign languages and mathematics from Encyclopaedia Britannica Films is given in a catalog cross-indexed according to the audio-visual provisions of Public Law 85-864, the National Defense Education Act of 1958. Teachers and administrators interested in making the best use of the benefits available to them under the Act will find this catalog a useful reference when ordering materials.

For a free copy of this catalog, circle number 882 on the Reader Service Card.

Burner design. Complete construction features and principle of operation of its mechanical pressure atomizing oil and nozzle-mix gas burner are provided in a new six-page folder available from the Boiler Engineering Supply Co. Illustrated with three full-page wash drawings, the folder details the burner's flame monitoring and control systems as well as the ignition system and includes a cutaway illustration of the burner system installed on an automatic steel firetube boiler.

For a free copy of this folder, circle number 871 on the Reader Service Card.

Coffee urns. A bulletin available from S. Blickman, Inc., describes its line of low, square coffee urns and gives prices for all models according to capacity and type of heating—gas, electric, steam—as well as urn dimensions in a series of detailed drawings. A stainless steel filter that eliminates the need for bags or filter papers is also described.

For a free copy of this bulletin, circle number 865 on the Reader Service Card.

Corrosion control. A new brochure containing information about an alloy bonding of zinc to steel that assures corrosion protection without the necessity of painting, has been issued by Fenestra, Inc. The galvanizing protection is self-healing since pin holes and

scratches in the surfaces of the window are automatically filled by the heavy zinc coating.

For a free copy of this brochure, circle number 886 on the Reader Service Card.

Dinnerware. Molded melamine dinnerware and lightweight plastic tumblers are described and shown in full color in a new brochure from Chicago Molded Products Corp. Information on molded tumblers, dish covers and tote boxes is included as well as chips showing the colors in which the dinnerware is available.

For a free copy of this brochure, circle number 876 on the Reader Service Card.

Dishracks. A 12-page catalog giving complete, detailed descriptions and illustrations of every item in its Sani-Stack line of dishracks has been released by the Metropolitan Wire Goods Corp.

For a free copy of this catalog, circle number 867 on the Reader Service Card.

Duplicating equipment. A brochure on offset reproduction has been announced by the Photostat Corp. The 12-page, multi-color booklet describes the newest line of the firm's offset duplication equipment together with close-ups of new design concepts and explanatory text. In addition, the booklet relates specific models to specific duplication tasks.

For a free copy of this booklet, circle number 888 on the Reader Service Card.

Electrification. Two new Headerduct underfloor wiring systems for use with cellular steel floor construction are described in a four-page bulletin issued by the National Electric Division, H. K. Porter Co., Inc. Application data, catalog numbers and guide form specifications for the two systems are also included.

For a free copy of this bulletin, circle number 870 on the Reader Service Card.

Flooring. A folder offering suggestions for the installation and care of hardwood flooring is available from the Maple Flooring Mfrs. Assoc. It suggests precautions to be taken to prevent the development of moisture problems when laying new flooring and provides information about spacing, expansion, ventilation and heating considerations.

For a free copy of this folder, circle number 884 on the Reader Service Card.

Gym floors. The preparation, sealing, painting of game lines and finishing of new gym floors are described in step-by-step detail in a new bulletin from Multi-Clean Products, Inc. Techniques for daily sweeping and two different methods of semi-annual cleaning are also described. The final section, devoted to restoration of old gym floors, covers sanding or stripping of the old finish as well as the application of new finishing materials.

For a free copy of this bulletin, circle number 899 on the Reader Service Card.

Instructional aids. Copies of the new 1959-60 catalog of instructional aids are now available from A. J. Nystrom & Co., publisher of maps, globes and charts designed exclusively for schools. The variety of publications includes physical, rainfall and climate maps, health, biology and science charts and graphs, globes and models.

For a free copy of this catalog, circle number 902 on the Reader Service Card.

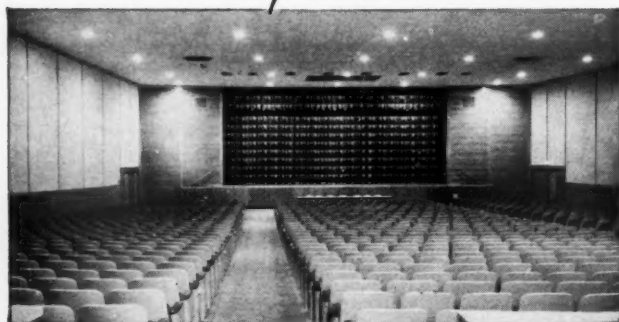
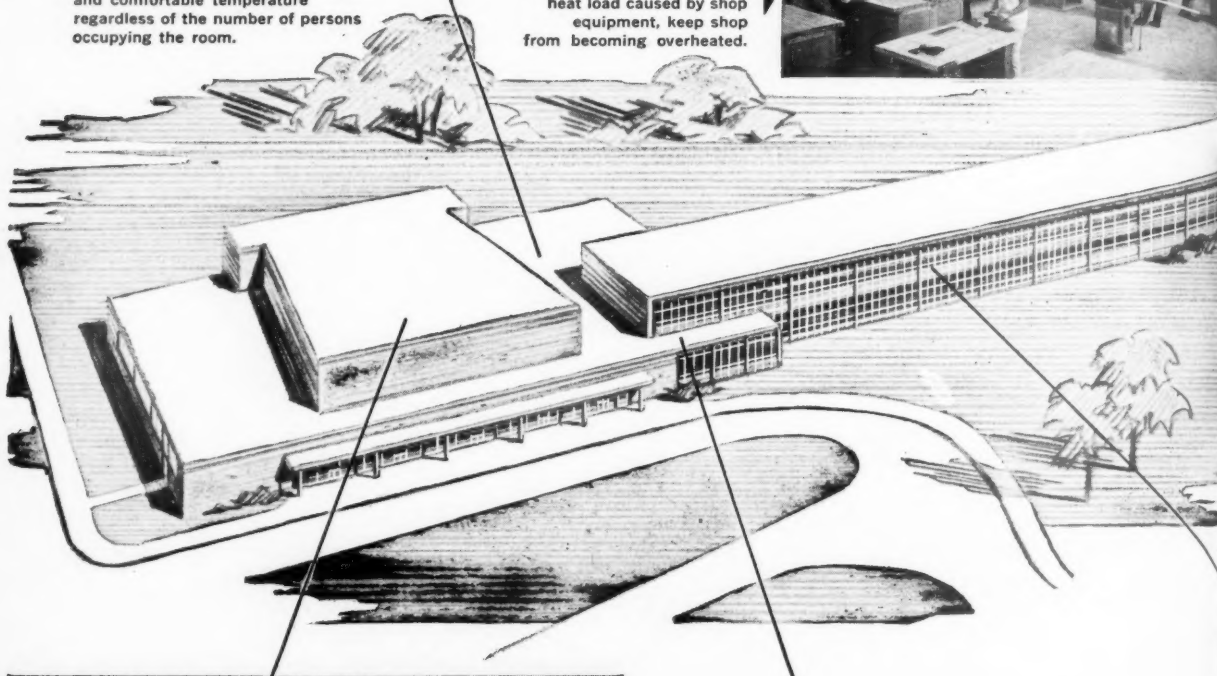
Laboratory supplies. A comprehensive, up-to-date listing of all common inorganic and Eastman organic chemicals, as well as a complete inventory of culture media, stains, indicators, diagnostic reagents and volumetric solutions are provided in the new Will Chemical Catalog, C/7. This new purchasing aid is fully cross-referenced and includes the latest prices and pack-

continued on page 103



Placed strategically on the wall of the large cafeteria, Johnson Dual Thermostats assure proper ventilation and comfortable temperature regardless of the number of persons occupying the room.

Dual Thermostats easily compensate for the extra heat load caused by shop equipment, keep shop from becoming overheated.



The spacious auditorium is kept comfortably heated and ventilated by the Johnson System. Johnson Dual Thermostats assure comfort for audiences of any size and permit quick adjustment for unscheduled or after-hours events.

Comfortable temperatures make the library a popular spot, help encourage fullest use of facilities by students.

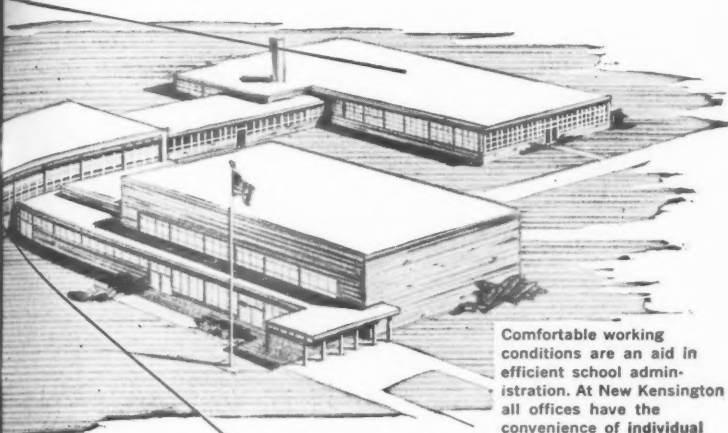


Johnson

Keyed to the needs of the modern school...

Pneumatic Control

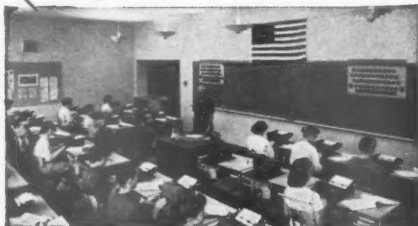
New Kensington High School, New Kensington, Pennsylvania. Hunter, Campbell & Rea, architects, Altoona; H. F. Lenz, mechanical engineer, Johnstown; Branna Construction Co., general contractor, Pittsburgh; E. M. Cole Co., mechanical contractor, Farrell, Pennsylvania.



Comfortable working conditions are an aid in efficient school administration. At New Kensington all offices have the convenience of individual room control.



Student alertness and, therefore, learning are influenced by the thermal environment. At New Kensington, Dual Thermostats maintain refreshing, even temperatures and assure correct ventilation in each classroom.



THE new high school at New Kensington, Pennsylvania, is a good example of the way a specially planned Johnson Pneumatic Temperature Control System meets the varied heating and ventilating control problems of the modern school.

At New Kensington, the numerous classrooms, assembly areas, auditorium, gymnasium, and shops are maintained at the thermal conditions best suited to each. All rooms in the building are individually controlled by Johnson *Dual* Thermostats.

When classes are over, all thermostats in rooms and areas not scheduled for after-hours use can be conveniently reset by groups, from a central point, to operate at low, non-occupancy temperatures. Should unscheduled occupancy of any room or area occur later, the normal comfort setting can be restored merely by pressing the room thermostat button... *without changing the economy settings of other thermostats in the building!*

The flexibility of the Johnson System makes possible large fuel savings while meeting every day and nighttime comfort need. A pneumatic control system such as this results in other important savings also, since it requires far less supervision and maintenance than any other type of control.

Tens of thousands of schools enjoy the unmatched comfort and economy of Johnson Pneumatic Temperature Control. Each Johnson System is custom-designed and installed by Johnson to meet the special requirements of the particular building or modernization program involved. If you plan such a program, it will pay you to investigate. Your consulting engineer, architect, or nearby Johnson branch will gladly furnish complete data. Johnson Service Company, Milwaukee 1, Wisconsin. 105 Direct Branch Offices.

JOHNSON CONTROL

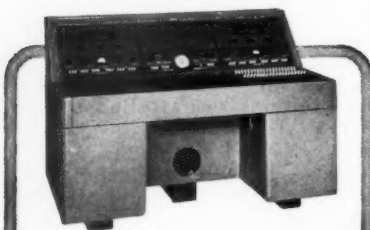
PNEUMATIC SYSTEMS
DESIGN • MANUFACTURE • INSTALLATION • SINCE 1885

designed to stay
modern for years!

Rauland

central control sound systems

RAULAND School Sound Systems are unsurpassed for versatility, rugged performance and value. They perform every conceivable communications function for administrative control, educational program distribution and 2-way communication. Here, truly, is the ultimate in budget-minded School Sound, designed and built to stay modern for years.



your choice of every desirable feature and program facility

RAULAND Central Control Sound Systems are available to fit the exact needs and budget of your school. Available features include:

FM-AM Radio—selects any radio program on FM or AM for distribution to any or all rooms

Phonograph—distributes phono program (transcription player or record changer); also available for use with tape recorder

Microphones—selects and distributes programs from multiple microphone locations

Intercom—permits 2-way conversation with any or all rooms

Special Features—Emergency Switch, all-call facility, program clock, monitor speaker controls, etc.



RAULAND Systems are available with capacity up to 160 classrooms. RAULAND Public Address equipment is also available for athletic field coverage.

RAULAND-BORG CORPORATION

Pioneers in School Sound

WRITE FOR
DETAILS

Rauland-Borg Corporation
3535-T Addison St., Chicago 18, Ill.

☐ Send full details on all RAULAND School Sound Systems.

We have _____ classrooms.

Name _____

School _____

Address _____

City _____ Zone _____ State _____

(Circle number 744 for more information)

FOOD CLINIC

Richard Flambert answers your feeding questions

QUESTION: Is it better to have a single source of supply for foods or to "shop around" and buy from several sources?

■ We do not think that any purveyor should have an exclusive on any item purchased by a school district. Our experience has been that such a purveyor loses some of his interest in keeping his customer happy, as there is no competitive urge to do a better job. Purchasing agents and other buyers should keep a daily or weekly quotation list on all major items. Quotations should be obtained from several purveyors of food-stuffs so that the buyer is aware of price fluctuations. When there is competitive bidding, one purveyor may be

"long" on a certain item that might be purchased at a substantial saving. If he knows that his is the only company that has the business, there will be no reason for him to pass on savings. The above does not necessarily mean that there should be constant changing of suppliers or "shopping around for bargains"—which frequently can be expensive bargains—but it does mean that the channel of information and purchasing should extend to two or three of the most reputable purveyors in each category in the district.

QUESTION: What has been your experience in lunch hour fire drills?

■ During the last year we have been repeatedly asked this question. Most school districts shy away from having fire drills while the children are eating. It is true that some confusion results from such action, but it is far better to have some degree

of confusion in practice than panic in reality. When it is decided that on a certain day a fire drill will be held, it is best to serve a cold lunch. In this way no matter how long the drill lasts the food is not spoiled or rendered unappetizing.

QUESTION: We have read so much about freezing of food on a large scale. Does this have any definite advantage?

■ We believe it does. We are designing a central kitchen which will serve 20 schools. We are planning to freeze entrees in individual containers, in units of 100,000, in the kitchen. Frozen meals will be delivered to the individual schools and kept in a freezer. Let's assume that on a Monday beef stew will be served to 200 children. Shortly before mealtime 200 trays will be as-

sembled with the salad, tableware, napkin, bread and butter and dessert and put into a tray rack. Just prior to the meal, 200 frozen orders of beef stew will be taken from the freezer, put on a gravity food conveyor, passed under a microwave light and placed on the trays ready for the children to pick up.

The advantage of this system is
continued on page 17



About the author. Richard Flambert is a partner in the firm of Flambert and Flambert, San Francisco and St. Louis, food service consultants and engineers specializing in schools and institutions. He is president of the International Society of Food Service Consultants.

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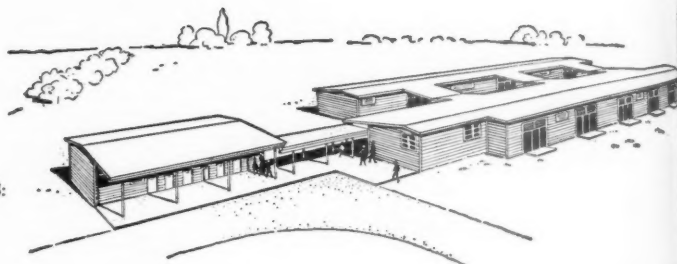
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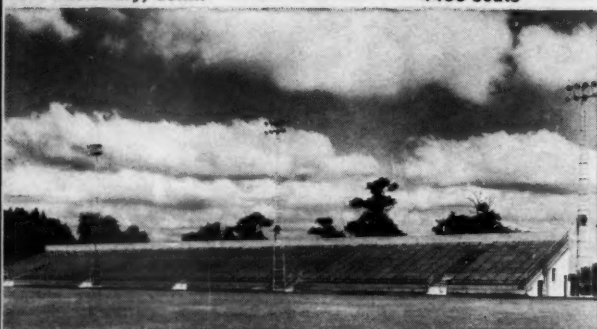
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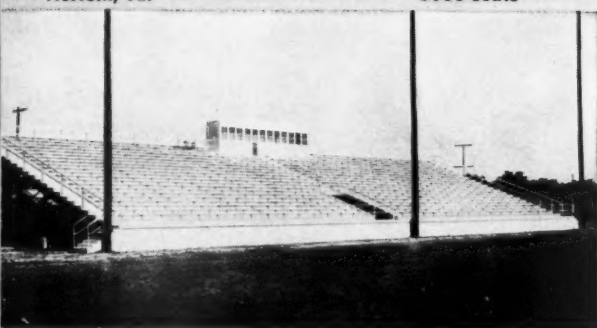
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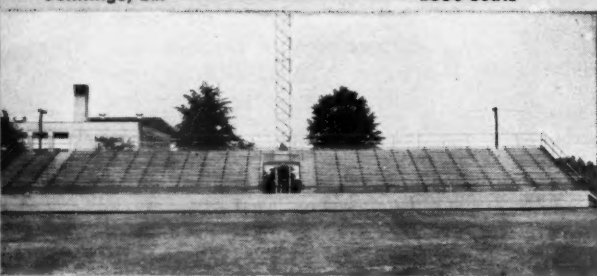
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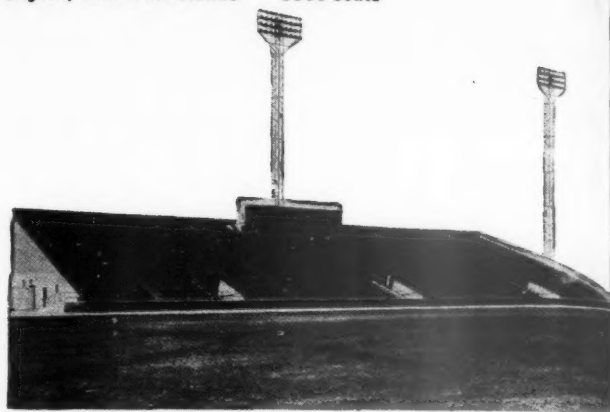
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the saving of cooking equipment in each school, uniformity of portions and quality and tremendous payroll saving in preparation. The finished product is excellent and is in no way

inferior to that prepared in individual kitchens. The future of food service will be dominated by freezing and reconstituting food in seconds.

QUESTION: Note is made of your comment (*SM*, Mar. '59, pg. 55), regarding a check list of cafeteria efficiency. Could you be more specific?

■ Check lists are used to evaluate the operational efficiency of a food service program. We recommend that the questionnaire be answered by the cafeteria manager and/or supervisor, together with a board member or superintendent or business manager periodically. In this way all members of the team will familiarize themselves with equipment, sanitation, etc. and will be in better position to upgrade food services. Some of the suggested questions might be:

Is all merchandise purchased on specification? If not, why not?

Is all food weighed in, and are bills checked for price and quantity? If not, why not? And, by the way, are there scales on which to weigh food in? We asked that question in one school and, upon being answered in the affirmative, discovered the scale on a high shelf in the store-room—a bit dusty.

Are credits requested for shortages and incorrect weights and pricing? How much did it amount to last month?

Are thermostats installed on all range ovens and bake ovens? Check them frequently.

Are accurate thermometers installed in all refrigerators? Temperatures correct? Checked daily?

Do you examine the contents of refrigerators carefully and frequently? You'd be surprised what you will find. And what do you do about it?

Is your storeroom scientifically arranged so that a maximum amount of food can be stored within easy reach? Have you studied other storeroom layouts in order to find out how to improve yours?

Is exterminator service used in your cafeteria? Should there be? How do you know?

When was your food department last checked by the health department? What did it report? Did you follow up on the suggestions?

What is the condition of your dish room? Do you have machines or sinks adequate to do the job? How do you know? Is dish water 140°

and rinse water 180° in the machine? Do you check temperatures frequently? Are there lime deposits in the machine? Do you have reputable detergent representatives check the use of cleansing product and advise and instruct on dish machine maintenance? You should!

Does an examination of garbage cans reflect waste? Or do you ever look into garbage cans? Do you ever inspect returned food trays to see what is left?

Is there a salvage account for grease, potato bags, egg crates, etc.? How much is it?

How high is your food inventory? Does it turn over six to eight times monthly?

Are the grease traps and exhaust grills cleaned often? Do you know?

Are the windows and ceilings and light fixtures clean?

Are your cooking utensils, glasses, china and tableware clean and spot free?

Do you like the color scheme of the cafeteria? Could better work be performed if the colors were changed? Ever discuss this with anyone?

Are your glasses and china all the same size for the same service?

Check the size of portion scoops and ladles to see if they are doing the job you want them to do. Are they rounded or leveled when portions are served?

What do you think of the general layout? What could be done to reduce needless steps? Can any of the equipment be moved or changed to help streamline production?

Are there formulas for all food preparation? Do your employees adhere strictly to them?

Do you know what each dish costs? Are recipes costed and records kept up to date?

Are meats roasted at low temperatures?

How long does it take to feed the average child? Ever time-study the service lines? Could the changing of

continued on page 20

PLAINEDGE HIGH SCHOOL enhances curriculum with BLONDER-TONGUE CLOSED CIRCUIT TV

BETHPAGE, L. I.—A comprehensive closed circuit TV system is now in use at the Plainedge Junior-Senior High School. It consists of two Blonder-Tongue 'Observer' TV cameras with Automatic Light Compensators, a mobile studio control console, a distribution system for 25 rooms, and 12 standard TV receivers. The complete system, including extra accessories, cost less than \$10,000.

The school has already scheduled 160 TV classroom shows. In one show, more than 1500 pupils witnessed a live demonstration of Japanese art, music and culture. In another, an entire biology class observed the dissection of a frog by the instructor, and then followed the procedure with their own specimens. The system has enabled Plainedge High School to extend its curriculum into areas which would otherwise have been impossible.

The system is easy to operate. Student or instructor operated, Plainedge telecasts can be made from studio, laboratory, or any room in the school. What's more, minute objects can be magnified to fill an entire TV screen for easier examination. Blonder-Tongue's Automatic Light Compensator makes it possible for the camera to provide sharp, clear pictures under any lighting conditions.

System design, installation, and layout was handled by the local Blonder-Tongue distributor, Shamark Distributors, N. Y. C. Maintenance costs for seven months of operation at Plainedge totaled only \$63.00.

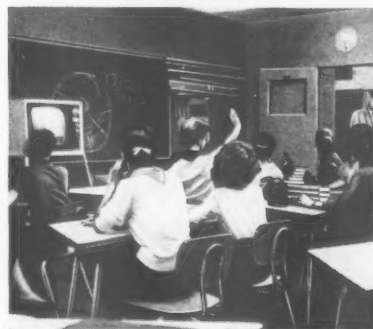
Blonder-Tongue Closed Circuit TV cameras and video monitors are now in use in many of the leading schools throughout the country. There's a local Blonder-Tongue distributor who will survey your needs and provide suggestions (at no obligation) on how you can use low cost Closed Circuit TV to enhance the curriculum at your school. Write for his name. Dept. SM-10



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Eye-rest colors help to relieve eye-strain of pupils at work in the library.



Tones that are cheerful and light brighten up the corridors—please both teachers and students alike.

Modern painting system provides color environment that improves learning processes, study habits and teaching efficiency

One of the latest and most comprehensive examples of how Pittsburgh COLOR DYNAMICS helps to improve grades and teaching efficiency is the new Junior-Senior High School of Great Neck, Long Island.

• This vast educational center comprises thirteen buildings. It was designed by Architects LaPierre, Litchfield & Partners, of New York City. Painting was done by Rubin & Weldon of Jamaica, L.I.

• More than 3600 pupils are accommodated comfortably in these buildings, six of which are for the junior high and seven for the senior high school. Each school has forty-four regular classrooms, including academic classrooms, science laboratories and home-

making departments. There are also two libraries, four gymnasiums, two auditoriums and multiple cafeterias.

• Pittsburgh's system of COLOR DYNAMICS was used to establish work or play areas with improved seeing conditions that relieve eyestrain and add to the efficiency and well-being of students and faculty members alike. Colors were chosen to fit each room to its special function. Sunny effects were painted into rooms with cool north or east exposures. Rooms that face the afternoon sun were given cool relief. Corridors and stairways are painted in light and cheerful colors.

• Try COLOR DYNAMICS next time you paint. See the difference it makes in work and study habits.



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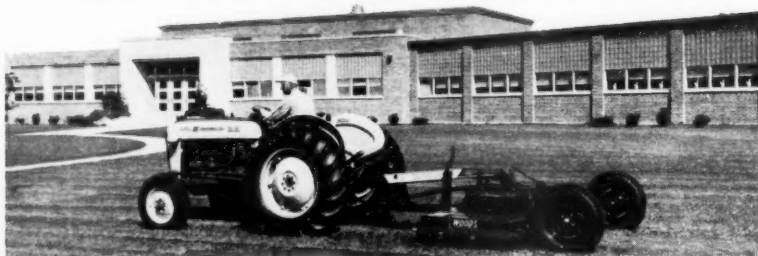
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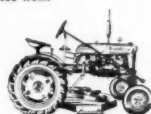
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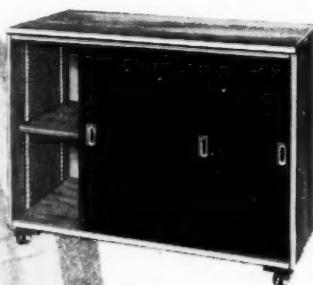
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counter or food arrangement speed up service?

Study the difference in overall cost of fresh, frozen and canned foods; between primal, fabricated and pre-fabricated cuts of meat.

What happens to left-overs? Why are there left-overs? Not getting customer counts? Why not?

Do you subscribe to national and local trade magazines, such as *SCHOOL MANAGEMENT*, *Institutions*, *American Restaurant*, *Restaurant Management*, etc? There are many, many good articles in them which could be of help to you.

Do you ever meet with the parents of school children to obtain ideas from them? We recently designed a questionnaire that was mailed to parents of all children in an elementary school district in the suburb of a large city, and we tabulated the answers. It was extremely helpful to us and to the cafeteria supervisor.

Do you listen to and obtain ideas from your employees? When you were a subordinate, didn't you have ideas? Goethe said we should all be students as well as teachers.

What is your method of handling overtime? Do you try to keep it at a minimum? Are your employees paid for overtime?

Do you know how many meals are served per man hour? Do you know how to figure it? Have you ever compared it with other districts?

What is the percentage of student participation? Do you know? If not, why not? If so, what are you doing to increase it?

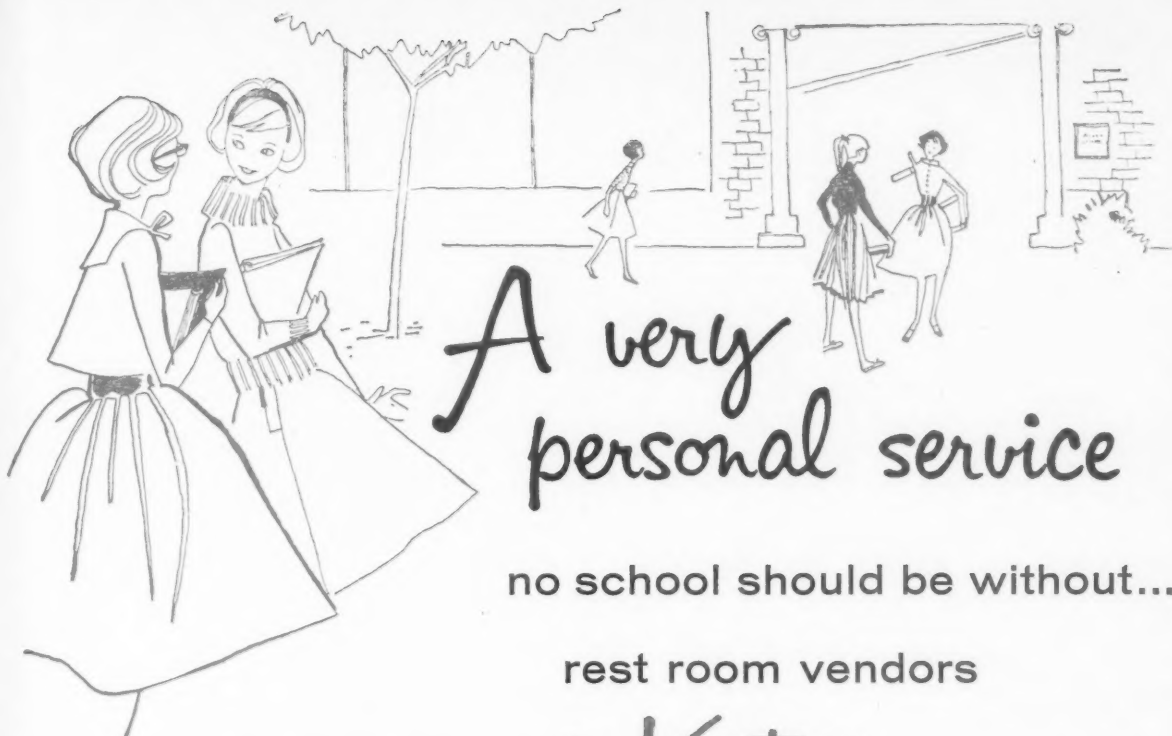
Do your employees know what is expected of them. Have you given them written instructions governing hours of work, handling of equipment, safety precautions, responsibilities and duties?

Have you set up production schedules for all items and for all employees?

What is being done in the way of employee training, both pre-service and in-service, promotions, vacations, recreation, insurance?

What is the condition of employees' rest rooms and toilets?

What training is given to student helpers so that they know what is expected of them? Does anyone check them, inspect their appearance, see that they have clean hands, face and fingernails, and that the girls wear hair nets? **End**



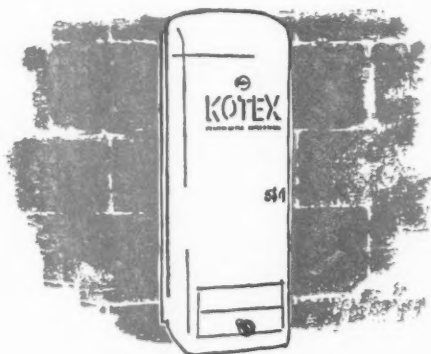
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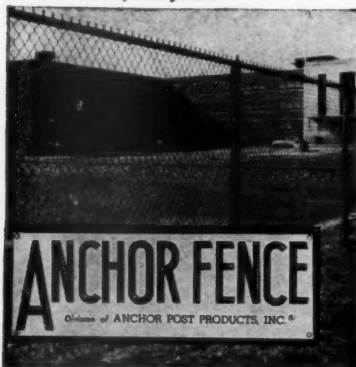
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A guide to useful information

CURRICULUM

English instruction. The sample of large-group instruction at Newton, Mass., High School presented in this stimulating booklet is a lesson in English as it was taught to a group of 110 average high school pupils by Henry S. Bissex, teacher-lecturer at the school. (See *SM*, July '58 for a full report on this teaching method.) It presents one of the more than 600 hours of large-group instruction given at Newton in 1957-58. Mr. Bissex used an overhead projector during his lecture, spoke extemporaneously and employed transparencies as his notes. For emphasis, he wrote on the transparencies with a grease pencil, the notes being immediately projected on the screen. The text of this booklet was prepared from a tape recording of the lecture. Stage directions have been added to aid the comprehension of the reader. According to Mr. Bissex, the lesson "risks being over-specific on the chance that teachers reading through [it] will see nothing mysterious, nothing very grand, but something useful or suggestive."

FOR INSTANCE NUMBER 1. *Tecnifax Corp.*, 195 Appleton St., Holyoke, Mass. Free

PURCHASING

Equipment directory. Designed to assist state and local school authorities in the better use of federal funds under Title III of the NDEA, this purchase guide was developed by the Council of Chief State School Officers with the cooperation of many participating organizations. The first volume of its kind in American education, it contains specifications and advice on the purchase and educational use of more than 950 selected items of equipment for instruction in science, mathematics and modern foreign languages. In addition, the 336-page guide contains material on special problems in the use of this equipment and extensive, annotated bibliographies. State departments of education are currently distributing copies throughout the nation. Additional copies may be ordered from the publisher.

PURCHASE GUIDE FOR PROGRAMS IN SCIENCE, MATHEMATICS AND MODERN

FOREIGN LANGUAGES. Published by Ginn and Co., Statler Building, Boston 17, Mass. 336 pages. \$3.95.

SCHOLARSHIP

The art of study. In this practical guide to effective study the student is taught how to read and listen effectively, how to take tests, how to use educational resources and facilities and how to learn the most with a minimum of time and effort. The authors, for years directors of research and evaluation at the reading laboratory at Morgan State College, maintain that a large percentage of high school and college students who drop out before graduation do so because their study techniques were improper and inefficient.

HOW TO BECOME A SUCCESSFUL STUDENT. By Dr. Otis D. Froe and Dr. Maurice A. Lee. Published by Arco Publishing Co., Inc., 480 Lexington Ave., New York City 17. 160 pages. \$2.50 (paper-bound \$1.25).

YOUTH FITNESS

Health and physical education. This 80-page report of the December, 1958, National Conference on Fitness of Secondary School Youth presents concrete recommendations on health and physical education requirements. Among them: 1) two semesters of health and safety education should be provided for all students in grades seven through 12; 2) a daily period of directed physical education should be provided for all secondary school pupils. Other suggestions: all teachers in secondary schools should have pre-service preparation in health and safety education; participation in musical organizations, driver education or military training should not be permitted to serve as a substitute for instruction in physical education. Other recommendations concern health credit for graduation, pupil-teacher ratios, interscholastic athletic competition for boys and the extension of the school day.

YOUTH AND FITNESS: A PROGRAM FOR SECONDARY SCHOOLS. Published by the American Association for Health, Physical Education and Recreation, 1201 16th St., N. W., Washington 6, D. C. 80 pages. \$1.50.



RCA ANSWERS YOUR QUESTIONS ABOUT A LANGUAGE LABORATORY

Just what is a language laboratory?

It is a foreign language practice room or part of an existing classroom devoted to the study of the conversational aspects of the language. It supplements regular classroom work and develops students' skills in speaking the language and understanding native speakers.

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What form do practice lessons take?

Most language teachers have decided on the "Listen-Respond" system, in which students listen to pre-recorded tapes, and respond orally during pauses in the tape. This establishes, in effect, a one-teacher, one-student relationship which is ideal for learning. Once language teachers have the laboratory program running smoothly they have more time for regular classroom work and more time for individual students.

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For secondary school use, one of four basic RCA systems will provide every necessary function without investing in elaborate and expensive equipment. Each RCA system can be enlarged without limit by simple addition of more units. Each student has his own semi-soundproof booth containing a transistorized amplifier, microphone, and headphones. Up to 10 language "channels" can be used simultaneously. RCA equipment is extremely inexpensive to install, operates at a safe, low voltage, and permits monitoring, two-way communication between student and teacher, and recording of students' responses for testing purposes.

How do I find out more?

A postcard or letter to Radio Corporation of America, Language Laboratory Sales, Dept. Z-110, Camden 2, N. J., brings an informative illustrated brochure. Send for yours today.



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Basic information that schoolmen can use as a part of a community education program

It's the law!

■ ■ ■ Virtually every act of a school employee during the course of a working day is surrounded by legal safeguards—and pitfalls. His every relationship—with school personnel, with pupils, with parents, with the community—is generally covered by some stricture, prohibition or legal precedent. A most welcome, informative new book on the subject, *Legal and Ethical Responsibilities of School Personnel*,* by Warren E. Gauerke, Ph.D., provides a clear, uncomplicated guide through this legal maze limiting professional behavior. Here are some of Dr. Gauerke's comments on particular areas of legal entanglement as they affect teachers and administrators.

Slander

"Slander is the utterance by one person of words about another person spoken in the presence of a third party or parties that will damage the character or reputation of the person about whom the words are spoken . . . any words tending to harm a teacher's reputation so as to lower him in the estimation of the community or to deter teachers and others from associating with him are defamatory words. . . .

"Any statement to a parent, another teacher, or to pupils in a class or to the custodian, that is detrimental to a teacher and will cause him personal harm, may be cause for action of slander. . . .

"Slandorous words can be communicated under 'privileged' circumstances. A teacher whose line of duty requires him to make confidential reports regarding other em-

ployees may claim immunity for such oral reports."

Libel

"The same general principles apply in the action of libel, except, of course, that libel consists of words printed or written and caused to be read by one or more third (disinterested) parties. Again, there is some measure of legal immunity where the words are written 'in the line of duty' as a confidential report. . . .

"On the other hand, if a teacher writes a statement about another teacher to a third party, such as a parent, a colleague, or even a pupil, that puts the other teacher up to ridicule and challenges his professional reputation, the teacher has just cause for an action of libel."

Teacher's authority and control

"One opinion often erroneously held by teacher and parent is that the parent 'permits' the teacher to do this or that when the child is under the jurisdiction of the school. . . . [The teacher] gets his authority from the state by way of the certificate to teach. He does not get authority to teach and discipline from the parent. . . .

"It is a well-established principle of law that during school hours the educational program of the pupil is in the hands of those employed by the board of education."

Corporal punishment

"When a teacher does administer corporal punishment and is charged criminally therewith, certain fundamental propositions of law must be borne in mind by the school and parent. . . .

"1. The teacher stands *in loco parentis* (in place of the parent), acts in a quasi-judicial capacity, and

is not liable for an error in judgment in the matter of punishment.

"2. The teacher's responsibility attaches home to home (i.e., while the pupil is on the way to and from school).

"3. There is a presumption of correctness of the teacher's actions.

"4. There is a presumption that the teacher acts in good faith.

"5. Mere excessive or severe punishment on the part of a teacher does not constitute a crime unless it is of such a nature as to produce or threaten lasting or permanent injury, or unless the state has shown that it was administered with either express malice (i.e., spite, hatred, or revenge), or implied malice (i.e., wrongful act wantonly done without just cause or excuse), and beyond a reasonable doubt.

"6. The defendant teacher is entitled to all the benefits and safeguards of the well-known presumption-of-innocence doctrine."

Limits of immunity

"The rule that 'the state (king) can do no wrong' has meant that the school district too is immune since it is an arm of government. The negligence of a teacher as an employee, however, is not reduced or canceled out simply because the employer (the school district) enjoys immunity. A teacher is personally liable for acts of negligence while performing his duties. . . .

"In the past the 'immunity' rule has lent 'moral support' if not actual 'legal protection' to teachers in their relationships with pupils. A teacher has felt shielded from possible court action because the school district could not be 'called into court'. . . . Teachers may be reminded that the 'old law' is gone and they had better not get involved so that a judgment can be won against them." **End**

* Warren E. Gauerke, *LEGAL AND ETHICAL RESPONSIBILITIES OF SCHOOL PERSONNEL*, 1959, Prentice-Hall, Inc., Englewood Cliffs, N. J. \$4.95.

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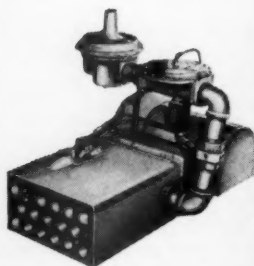
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A digest of current happenings in public education

Growth of Russian in US schools, noted

The number of high schools in the United States offering courses in Russian climbed from just 16 the day before the Russians launched their first Sputnik in 1957, to more than 400 as school opened this year.

The figures do not include Russian courses offered over television, many of which are accredited through universities. It is also estimated that there are 27 junior highs and a smattering of grade schools offering beginning work in the subject.

Despite the jump the United States lags well behind Russia in training students in the other's language. While there are still only a few thousand high schoolers here studying Russian, there are close to six million Russians studying English.

Two big problems seem to be holding back the spread of Russian teaching. The first, lack of qualified teachers, has resulted, for example, in 60 Massachusetts high schools going without the course, though all had expressed an interest in teaching it.

On the other hand, in some areas, including New York's Westchester County, usually a leader in introducing new courses, school boards have shied away from the subject for fear of being called down for teaching "subversive" courses.

Parent-teacher organization launches national TV check

A continuing evaluation of television programs was launched last month by the National Congress of Parents and Teachers. The drive, announced in the organization's monthly magazine, "seeks to convert the mounting protests against shoddy TV programming into intelligent discussion that can be helpful both to the TV industry and to the viewing public."

In presenting the idea, Editor Eva H. Grant warned that the organization was not becoming a censor.

"We are weary," she wrote, "of being told that although a steady diet of aggression and violence may be

harmful to children, there is no evidence that it really is. We are also skeptical of the argument that blood-and-thunder programs have a healthful effect because they siphon off a child's natural hostility. We believe there are less brutalizing outlets . . ."

The PTA magazine published member evaluations of 12 programs aimed at children and adults. Other TV offerings will be considered in future issues of the *National Parent-Teacher*, with research to be done by an expanding network of viewing groups made up of "PTA members who know something about TV and a great deal about children."

Morning prayers upheld by New York court

A justice of the New York State Supreme Court has ruled that the non-

compulsory saying of a morning prayer in the public schools is constitutional.

Justice Bernard S. Meyer ruled that while the prayer *could* be said, it may not be mandatory and children of parents objecting to it must be given accommodations elsewhere while the prayer is being recited.

The case brought before Justice Meyer involved the Herricks school district on New York's Long Island. The district had adopted a non-denominational prayer, recommended by the state board of regents, in July 1958.

Five residents, supported by the American Civil Liberties Union, brought the case to court. In ruling that the prayer could be said, Justice Meyer stated that the First Amendment does not prohibit the noncompulsory saying of a prayer.

He did note, however, that, in the particular case presented to him, the opening of each day with a prayer was "mandatory in form" and therefore ob-

Too good to miss . . .

On the spot . . . A 14-year old schoolboy was Johnny-on-the-spot in New York City recently, when the lights went out on Manhattan Island. Donning the white belt that marked his membership in a school traffic safety squad, he stepped to the middle of a major intersection, unsnarled the jam caused when traffic lights failed to function, and then, using a flashlight, easily and expertly guided motorists on their way.

On the spot . . . There's another way to be on the spot. Take the case of the teachers' meeting recently in Oklahoma City. It was interrupted momentarily so that an announcement could be made concerning an illegally parked car. The man who got up to move it was the school's driver education teacher.

On the spot . . . More than 100 Newark, N. J., school administrators are on the spot because they are off the spot city officials and the board of education think they should be on. To put it another way, the administrators, all of whom live outside the Newark City limits, have been ordered to move back before January 15, 1961 or forfeit their jobs. The ruling does not affect non-resident teachers or civil service employees.

On the spot . . . Seemingly on the wrong spot is a bus marked "Pleasantville, N. Y., Cottage Country School" which is up for auction in Argentina. It is one of a group of vehicles seized by the government as smuggled goods. Authorities in Pleasantville claim no nefarious involvement. "It's a 1947 model we traded in two years ago," says the school's business manager, George Hillelsohn. "Whoever buys it, I'm afraid, is going to get a lemon."



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jectionable. He remanded the matter to the local school board "for further proceedings not inconsistent with the opinion."

In the 46-page opinion, Justice Meyer noted that federal and state constitutions required that parents be advised of the adoption of the prayer, its wording and the procedure to be followed when it was said, "so that a conscious choice can be made whether a child shall or shall not participate."

The decision will be appealed to the state's highest court, the appellate division of the state supreme court, by the Civil Liberties Union. The reason for the appeal, according to a spokesman, is that the decision "does not clearly hold that publicly supported schools and facilities may not be used for prayer and other religious devotions, and because we feel that even noncompulsory regulations pertaining to the saying of a prayer are unconstitutional."

Indications are that whatever the ruling of the appellate division, the case will eventually be brought before the United States Supreme Court for final decision.

Student driving permits lower accident rate

Traffic accidents during school hours in the vicinity of the two Modesto, Calif., high schools have been cut in half by a program limiting student cars and drivers. The program was started by the Modesto Board of Education and the city's police department.

Before a student can drive his or her car to school, it is given a thorough safety check by members of the police department. If the vehicle passes, the student is given an okay to apply to his school for a driving permit.

The deans of men at Modesto and Downey high schools issue the permits after conferring with students and, sometimes, parents. If the student has his parent's permission, he can get a permit to drive home for lunch. Only his own brothers and sisters can ride to or from school with a student driver at any time.

Students police the parking lot and make sure no unauthorized cars enter or leave during the day.

A student driver leaving the lot during the day without a permit to do so, or loitering with his car around the school before or after classes, gets parking privileges taken away.

The program was started in Modesto last year. Superintendent James H. Corson, in discussing its merits, said: "This plan has proven most effective,

as evidenced by a report from Police Chief George Bowers. This report showed that during the first six months of 1959, against the same period of time in 1958 (before the plan was in operation), the accident rate during school hours was 66% less in the vicinity of Downey High and 45% less around Modesto High."

Citizen committee writes, passes own school budget

In strife-torn Levittown, N. Y., a budget proposed by an economy-

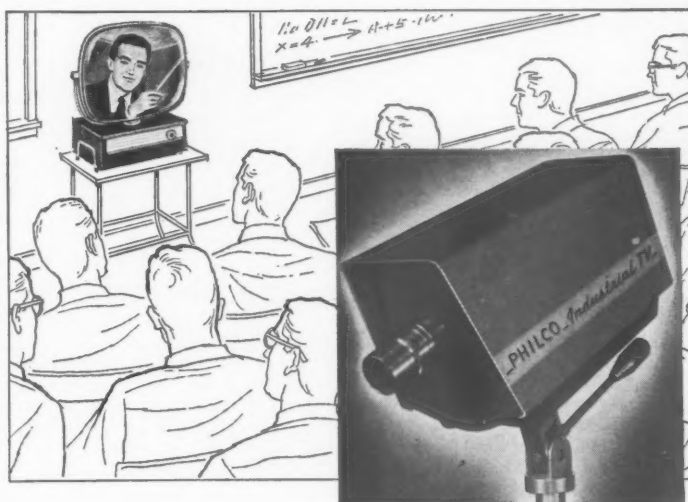
mind citizens' group has been passed after two votes had defeated a budget suggested by the school board.

Levittown is the largest school district on suburban Long Island. During the last few years it has been the scene of major battles over such issues as religion in the schools, report cards and recreation programs on school grounds.

Underlying each of these battles has been an annual struggle over the size of the school budget. Last June 25th, for the second time in less than a month, economy advocates sent a \$10 million-plus budget, proposed by the school board, thundering to defeat.

As a result, the board resorted to

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an "austerity budget" authorized under New York State law. Under the law, districts that cannot get voters to approve funds for the schools prepare a budget that does not include money for free textbooks, transportation, hot lunches and any but emergency repair and maintenance. Use of schools by community organizations must also be barred. Such a budget, when approved by the state department of education, is imposed on the taxpayers without any further vote.

In Levittown's case, the net effect of the proposed austerity budget was a reduction of more than \$900,000 in proposed expenditures.

This, however, did not meet with the approval of the very groups that had campaigned to defeat the regular budgets. This group, with the aid of minority board members, took the unprecedented step of preparing its own budget. Then, with 9,000 signatures on a petition, the group forced the board to submit the new proposal to the voters. It was passed by a large majority.

The new budget restored cafeteria, transportation and free textbooks and instead cut away from the instructional services of the district.

It increases the average class size in Levittown from 29.3 students to 32.3 by eliminating 79 teaching positions. Three of the district's seven psychologists and one assistant superintendent of schools were fired.

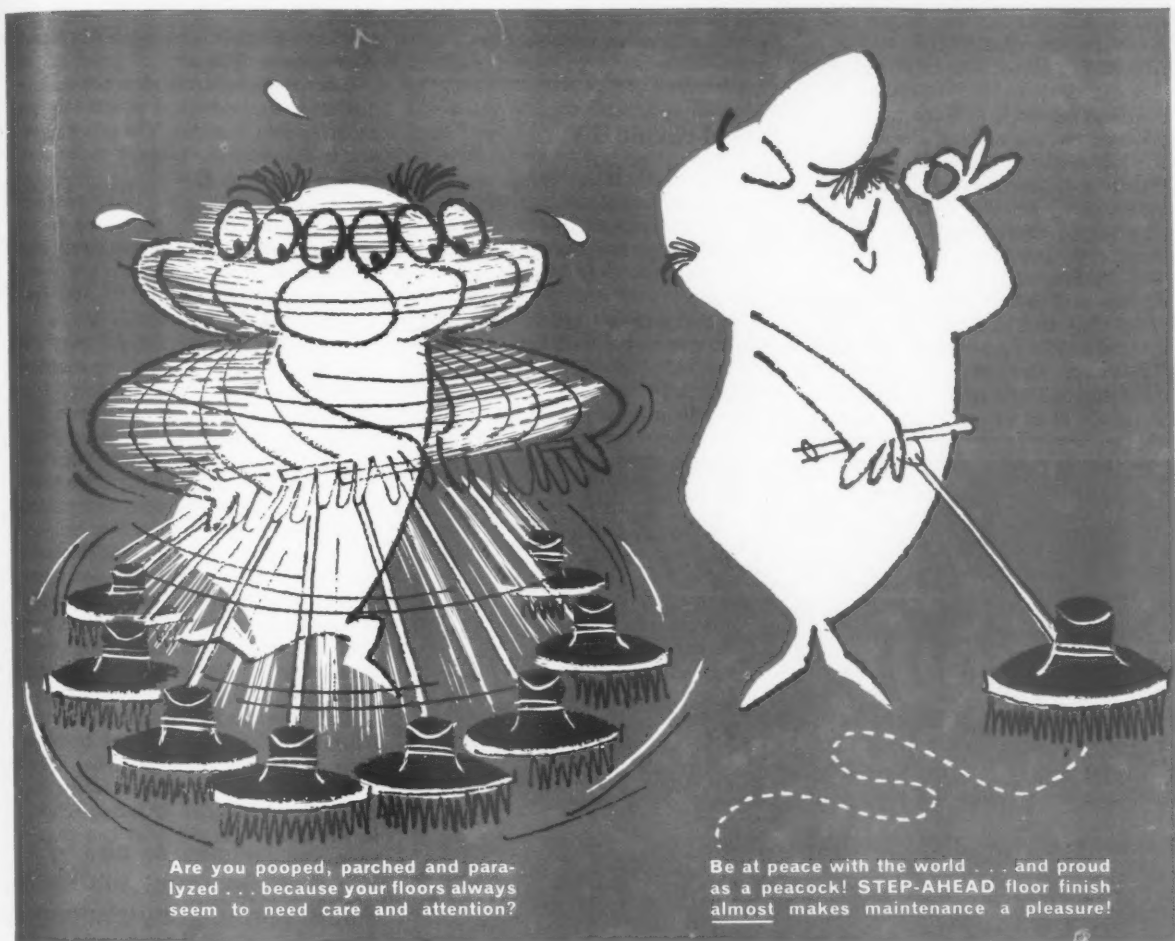
Despite the budget's passage, there were still rumblings of discontent in the community of 70,000. As one supporter of the original budget put it: "Our students will now get transported to and from the school buildings, they'll eat hot lunches and have books to read. They've seen to it that the schools will provide everything but an education."

Second-hand portables relieve Texas overcrowding

Two school districts in southeast Texas have bought portable school buildings from a third, to tide them over until they can get bond funds to build permanent buildings.

The Northeast Houston school district has bought a 16-room and an eight-room school building from neighboring Houston to relieve the overcrowding which last year put 2,000 of its elementary pupils on double sessions. The 24 additional rooms will put almost all the third-graders on single sessions. All first and second grade students will be on double sessions for one more term.

The two buildings cost the district



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\$41,000, \$25,000 for the larger and \$16,000 for the smaller.

The Aldine school district, also close to Houston, bought a 14-classroom school and moved it to a central campus where there is now an elementary and a junior high school. The building is handling an overload of about 900 students, keeping the district from having to put any students on double sessions.

The Aldine district has been in deep financial trouble, (see SM Aug., '59, Pg. 26) and could not look forward to a building program to increase its capacity. Use of the building, bought for \$47,000, will give school officials the ability to meet an enroll-

ment increase, and a little more time to figure out a permanent solution.

Closed-circuit TV started in West

One of the first educational television systems in a secondary school west of the Mississippi has been installed at Weber High School, Weber County, Utah.

The closed-circuit system, including three cameras, was installed at a cost of some \$23,000. This does not include 12 to 14 receivers.

The system is being used to instruct

1,200 students at the county high school in English, biology, history and American problems.

Two of the cameras were set up in a 1,000-square-foot room which was remodeled into a studio. The other camera is designed to transmit slides and similar teaching aids.

An adjacent 400-square-foot room is being converted into a control room and another 200-square-foot area into an observation room. Lessons are being telecast to classes of 300 to 360 students in the auditorium.

A training session for 29 teachers involved in the new teaching method was held during the summer.

The system is in use for seven 50-minute class periods each day. After the students have attended televised classes in a subject one day, they receive individual classroom instruction the following day.

Superintendent T. H. Bell declared the Weber Board of Education took the action instead of purchasing additional temporary steel buildings to provide classroom space for an increased enrollment at the school during the 1959-60 school year.

The board also considered the possibility that the system might help relieve a teacher shortage. The board has indicated that it will consider expanding the system to other schools in the district, if the trial run proves successful.

School board gag no joke to residents

A gag rule, instituted by a school board in New York's articulate Suffolk County, is no joke according to a citizens' group formed to fight it.


Under the rule, passed with one dissenting vote by the Copiague, N. Y., board, non-members may not speak at board meetings unless they ask for permission in writing four days in advance and limit themselves to subjects put on the agenda by school officials.

Speaking out at school board meetings has become a popular form of after-dark entertainment in the area and in Copiague was said to have constituted a "minor art form."

The district has been split by two warring groups, each with representatives on the present board. Meetings generally lasted long into the night and Board President Charles Pfaffenbach stated that "the people have been running the board instead of having faith in their elected officials."

"The policy is legal," Pfaffenbach said, "and it should be standard pro-

continued on page 41



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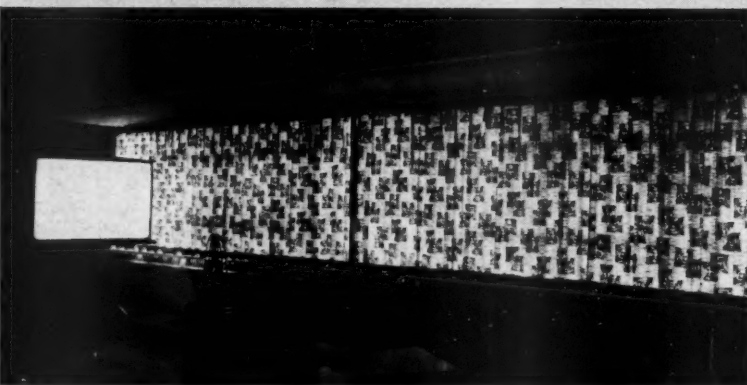



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cedure. It may appear cold-blooded but we'll make exceptions in emergencies. We've just had too much running of the board meetings by the people."

Town runs cram course to up teacher reserve

A one-week cram course for college graduates has increased the pool of qualified teacher substitutes in Norwalk, Conn. The course, sponsored by the state department of education, was held the week before school opened.

Several Norwalk principals served as teachers for the course. Conferences were held with regular teachers and once school was underway course participants were invited to observe classes in operation.

The state education department has agreed to issue emergency substitute teacher certificates to persons with a college education who took the course. This is expected to alleviate a serious shortage of applicants for the \$15 per day jobs in Connecticut.

PTAs join to conduct school district survey

Seven PTA groups in Long Beach, N. Y., have banded together to conduct a district-wide census of pre-school and school age children. The district conducts such a census each October at an annual cost of \$22,000.

In previous years schools were shut for two half days each October and teachers were deployed to the house-to-house canvas task.

The PTAs have offered to do the job free, and are now seeking 400 volunteers to carry out the work. "This is one of those rare opportunities for taxpayers to save the district money," said Mrs. Pearl Weill, census chairman. "I'm sure it will be a success."

Student bus drivers cut transport costs

A North Carolina high school principal has claimed that school districts throughout the United States could save a total of \$60 million a year by employing students to drive school buses. He stated this would bring no loss in efficiency or safety.

Randolph E. Carothers, principal of Ashly High School, Gastonia, N. C.,

compared student and non-student drivers in six counties in North Carolina and six others in South Carolina. The study was conducted at Florida State University.

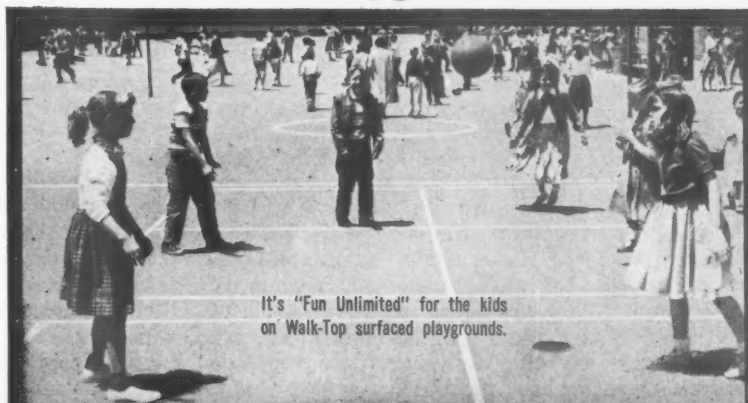
Carothers found that student drivers were superior in requiring passengers to remain seated while the bus was in motion, not taking chances in passing another vehicle and giving proper signals for stopping and turning.

Non-student drivers were superior in four respects. They required substitute drivers and buses less frequently, were less often late to school and got a better response from passengers when they gave instructions.

Student drivers were found better in not getting angry or excited, in getting along well with passengers and being honest and personally clean. Non-student drivers were slightly superior in economy of operations and maintenance of buses.

Although, in the overall picture, student and non-student drivers appeared to stack up pretty evenly on all these scores, Carothers pointed out that schools were paying an average of \$779.76 per month for the luxury of non-student drivers. Student drivers, he found, were being paid an average of \$29.24 per month, more than \$750 less.

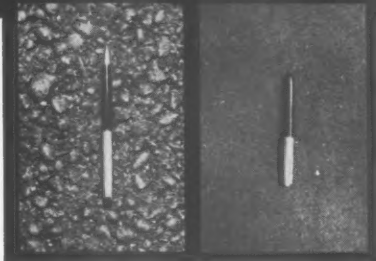
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Does your district need a

When does a district need a business official? What are his duties? How much should he be paid? What rank should he hold? These are a few of the questions this article seeks to answer.

■ ■ ■ If your district has been contemplating the addition of a business manager (or if you have been thinking about adding to your business staff), a survey conducted by SCHOOL MANAGEMENT last year will provide a pretty good gauge of what you can expect in the way of results. We asked a representative sample of superintendents and school board members:

1. Approximately how many hours per month do you spend on your job as a school official?

2. Approximately what percent of this time is spent on strictly "non-educational" or business duties (like supervising construction, approving bills, purchasing, building maintenance, insurance, transportation, etc.).

We divided the answers to these questions into two groups, those from superintendents and those from school board members. Then we split these returns by district size. Finally, we tabulated the answers by whether or not the respondent's district had a business manager. (See the chart below, for the results.)

Operating without a business manager, most superintendents spent more than half their time on non-educational affairs. With a business manager superintendents found they could spend almost two-thirds of their time doing the job they were hired to perform. The survey showed that the addition of a business manager had the same proportional affect on the board.

While this "horseback" survey certainly doesn't provide scientific evidence of the value of a business official, it indicates pretty clearly one of the practical top management considerations involved in deciding whether or not to staff for business: the "business" of education is a severe drain on both superintendent and board member, and both can devote more time to education *per se* when a business official is present.

When is a business manager needed?

The best categoric answer to this question was given by Dr. Bernard Oosting, business manager of the Hinsdale, Ill., high school. He concluded that when a school has 1,000 students or 40 to 50 teachers, it probably needs a business manager on the administrative staff.

Still another authority—Dr. Lloyd Nelson, of the University of Southern California—recommends a slightly different formula. He suggests that any elementary district that has 1,500 pupils, or any high school district with 1,000 pupils, should have someone in charge of business affairs. He also suggests that any district maintaining grades one through 12 needs a business manager when it has as many as 1,200 pupils.

Both of these men warn, however, against the use of pupil population as the sole determinant. Here, for example, is a typical case where the pupil enrollment

District size	Total hours per month spent on the job	% of time spent on non-educational duties	
		With bus. mgr.	Without bus. mgr.
SUPERINTENDENTS			
Under 1,200 pupils	215	34%	49%
1,200-6,000 "	205	33%	53%
Over 6,000 "	222	35%	43%
SCHOOL BOARD MEMBERS			
Under 1,200 pupils	16½	53%	61%
1,200-6,000 "	20	52%	58%
Over 6,000 "	25	51%	60%

a business manager?

yardstick is inaccurate. A district might have only 500 pupils yet cover a geographic area of 50 or 60 square miles and maintain three elementary schools and a central high school in different towns. It might operate four or more buses, derive its revenues from three or more sources, conduct a federal lunch program, and be in the process of building a new school. Obviously, the board and superintendent would be over their heads in administrative and business detail.

Consider these variables

A rather comprehensive list of questions was recently prepared by Dr. Nelson and Dr. S. C. Joyner, business manager of Los Angeles, for school boards that are asking themselves: "When do we need a business manager"? These are the questions:

1. Does the district *do its own bookkeeping* or is this done by a city or county agency?
2. Does the district *write its own warrants*?
3. Does it *operate a transportation program*?
4. Does it *operate a food services program*?
5. Is the district *growing rapidly*? Increased or accelerated growth causes numerous business problems.
6. Is the district engaged in a *building program*?
7. Is the philosophy of the district that the business office handles the building program only after blueprints and specifications have been completed, or is the business manager involved from the beginning?
8. Does the district have a separate *research office* or is the business manager expected to exercise considerable supervision and direction of classified employees?
9. Is the district *custodian of its own funds* or is this handled by a city or county treasurer?
10. Does the district have *fiscal independence* or are many of the business office duties merely ministerial?
11. Is it the philosophy of the district that the *business manager perform routine functions* only, or is he a team man with the superintendent, involved in policy and planning for the district as a whole?

The authors of these questions point out that, in general, it is better for the superintendent to stay as the chief educator and delegate business functions when they become substantial rather than vice versa.

The duties of a business official

What should a school district expect a business official to do? Much will depend on his relative rank in the organization chart of the school system, his training, and the willingness of both the board and su-

Eight Basic Questions

■ Because of the great confusion concerning the role of the business manager in a school district, SCHOOL MANAGEMENT recently sent an editor to Syosset, N. Y., to talk to three people vitally involved in the management of a district which has the services of a business official. In selecting Syosset, the editors were approaching a district with an unusual array of talents represented in its top management:



Superintendent Donald Phillips had held similar posts in Rutland, Vt., and in New Rochelle, N. Y. In the first instance he worked with no business manager. In his other two districts, Dr. Phillips had the assistance of a business manager. Dr. Phillips himself has taken a vital interest in the business affairs of school operation, having written his Ed.D. on the presentation of school budgets.



Robert Hertwig, assistant to the superintendent for business affairs, is chairman of the Nassau County School Business Officials. He was a teacher, an assistant principal and holds a superintendent's license in New York State. In addition to his educational experience, Hertwig spent six years as business manager of a department store and has served as a district clerk.



Board Member James R. Collier brings to his assignment a background as principal associate in the management consulting firm of Cresap, McCormick and Paget. Mr. Collier specializes in school management problems and directed the Hackensack, N. J., study, reported in the March and September, 1959, issues of SCHOOL MANAGEMENT.

Answers to eight basic questions concerning the role of the business manager in a school district start on page 45. They were taken from the tape recording of an interview involving a SCHOOL MANAGEMENT editor, Dr. Phillips, Mr. Hertwig and Mr. Collier.

perintendent to delegate responsibility. A "strong" business manager can reasonably be expected, however, to take over in the following areas:

Financial planning. He becomes the chief financial analyst for the district's fiscal problems. In a very real sense, he must translate the budgetary requests of the educators in terms of the district's overall ability to pay. In other words, he provides the alternatives, in terms of facts and figures, upon which the chief administrator and the board can make policy decisions.

Accounting. This function includes both the historical recording of costs and the statistical data needed to project trends in costs. Budget control is not the least of these functions.

Inventory control. The maintenance of current and accurate records and inventory controls are a prime responsibility of the business manager. This function impinges heavily on **insurance control**, which is still another of his functions.

Transportation. The extent of the involvement of the business official in the transportation program will depend upon its size. If a district operates a sizable fleet of its own buses, a separate director of transportation, reporting to the business official, is the general practice. In smaller districts, the business official will handle the job personally.

Purchasing. This is one of his most important functions and encompasses standardization, "competitive shopping," discounting of bills, and anticipation of delivery lag.

School plant. The control of maintenance and operations—and adequate staffing for a proper job—is a direct responsibility of the business manager. The duty often carries the responsibility for hiring and training non-professional employees.

How much power should he have?

There is a popular belief in some circles that educators resent the growth of the business management function and try to inhibit it. Facts do not bear this out. It is interesting to note that in recent years more and more business managers are, themselves, career educators who have come up through the ranks as teachers and principals.

If there is suspicion of the business function, it can probably be attributed to the controversy that exists between proponents of the "dual system" and the "unit system" of business operation. In the dual plan the business manager ranks *with* the superintendent and reports directly to the board of education. This practice is mandated in Pennsylvania and New Jersey, and is practiced in other districts without the benefit of legal requirement. In the unit plan, the business official reports directly to the superintendent. The dual plan is somewhat more widespread than is generally recognized. In a study conducted by the Cooperative Development of Public School Administration in New York State, in 1956, it was found that about 25% of the business officials reported directly to the board.

The wisdom of the dual plan has been under attack for many years. It certainly violates the fundamental principle of efficient management by creating two exec-

utives at the summit, and professional management consultants generally abhor the practice.

Proponents of the dual system point out, however, that the school board is the ultimate policy and financial decision-maker. These decisions can seldom be divorced from financial considerations. Thus, they reason, there is only one summit authority, the board, and the chief educational administrator and the chief business official are its dual deputies.

Qualifications of a business official

As mentioned earlier, there is a perceptible trend toward employing educators in the role of business official. This is particularly true in larger districts where the chief business officer often carries the title of assistant superintendent for business affairs. Quite obviously, however, the job requires specialized training and qualifications. This training is available, in most good graduate schools, thanks to the pioneering efforts of the Association of School Business Officials.

If this trend toward academic training in business affairs for professional educators continues—and it most probably will—tomorrow's average business manager will be an educator. Even today, a school district can shop with some confidence for a man specifically trained in school business management. This should not legislate against considering non-academic prospects who are otherwise properly qualified to handle the responsibilities outlined above. Some superintendents clearly prefer accounting experience as a criterion. Some months ago, Robert Johnson, superintendent of Jefferson County, Colo., told an SM editor, "It is my personal opinion that a man should be a CPA, or at least have equivalent training in this field. I do not believe that a broken-down school superintendent should be made a business manager just because you have to have one. I feel completely at home with my \$9 million budget. This would be true if it were \$9,000 or \$90 million, because our budget is *professionally prepared*. That doesn't mean, for example, that our department of instruction doesn't work closely with our business manager. The department of instruction determines *what* is bought and the department of business services determines *how* and the quantity."

How much should he be paid?

Three years ago, when the Cooperative Development of Public School Administration conducted its study, it found that the median starting salary for a full-time school business administrator was \$5,500 in New York State. The salaries actually ranged from \$3,000 to \$12,000, and the median maximum salary was \$7,500 with a range from \$3,500 to \$15,000. Undoubtedly, the salary level has increased since that study.

Much depends upon the size of the system, its location, and the scope of responsibilities that will be assumed by the officer. In Los Angeles, for example, the business manager's salary is approximately 80% of the salary received by the superintendent. It is not uncommon, when the business manager is a full-fledged member of the top management team, for his salary to be somewhat higher than the highest teaching salary.

The role of the business manager

Question 1

What does it mean to have a business manager in your school district?

How has it affected your individual jobs and responsibilities?

PHILLIPS: I've been a superintendent in three communities, one of which had no business manager. The business manager assumes a number of responsibilities that must otherwise be assumed by the superintendent, himself. This assumption frees the superintendent to be more of what I believe a superintendent should be—the educational leader in his community.

In a system with no business manager, the superintendent must provide personal supervision of accounting procedures, payroll procedures, the maintenance and operation of school buildings, budgeting procedures, inventory of equipment and supplies, matters of insurance, transportation and cafeteria operation, and the like. All of these are essential parts of the modern school system. If they are not handled properly, the community and the school system will suffer.

But if the superintendent of schools has to give personal supervision — detailed supervision — to these aspects of running a school district, then he just doesn't have time to give to matters of educational import. He can't work on curriculum studies, on supervision of instruction. He can't work properly with his principals and teachers.

COLLIER: As a board member, this is what having a business manager in this district has meant to me. It has meant that the board is presented, time and again, with detailed information on which to make decisions. This information was formerly either not available, or it had to be obtained by the board members themselves. As soon as you allow that to happen, you are diluting the

work of the board and you are also bringing the members much further into school administration than they should go.

Board members have no business getting involved in day-to-day administrative affairs because they don't have the constant day-to-day contact with information on which to make any type of valid administrative decisions. But unless a district has a business manager, or some other business official, no matter what his title, to prepare the detailed information the board needs, the tendency is to have individual board members get deeper and deeper into the administrative functions.

Q. Has the addition of a business

manager saved time for the board?

COLLIER: Very definitely. While the number of board meetings may have declined only slightly, we have been able to set aside a fair share of them for basic educational policy discussions—where we are going and why—whereas, in the past, none of them were for that purpose at all.

PHILLIPS: And from the point of view of the superintendent, that is a very refreshing thing because, during most of my career as a superintendent, about 10% of the board meeting time was devoted to consideration of educational matters; about 90% was devoted to business and routine matters. But this board is constantly stressing its interest in

"If the superintendent has to supervise business affairs, he doesn't have enough time to devote to educational matters"

PHILLIPS



"The board is presented with detailed information on which to base decisions." COLLIER



taking up educational matters. Only through the participation of the board—and incidentally, the public—in discussions of educational matters, will we ever solve our educational problems.

HERTWIG: I'd like to speak just briefly to the original question. I conceive of my role as business manager as one of aiding the superintendent and the board by supplying them with the basic facts upon which to make decisions of a business or financial nature. Any time that I can simplify their work in this area where I am most competent, I am freeing them to make

decisions and investigations into other areas where their help is most needed.

PHILLIPS: I can recall having asked one of my fellow superintendents, in a rather small district, a certain question of educational matters. I must have asked him at precisely the wrong time because he said, "Don, I'll have you know that I run the biggest cafeteria operation and the biggest bus system of anybody within 50 miles of me, and I haven't got time to think about matters of curriculum." Maybe that is the answer to what it means to have a business manager.

Question 2

Does every school district need a business manager?

PHILLIPS: I think there is a size factor which should be taken into consideration here. There are many school districts that are too small to actually warrant a "superintendent of schools." In such a district, it would be possible for the chief administrative officer to provide appropriate supervision to clerical help that does these business operations.

HERTWIG: Nevertheless, what Dr. Phillips just said points out the need in *any* district to have some kind of aid on business affairs. Whether the person helping out is called the su-

perintendent's secretary, an accountant, the secretary of the board, or is just a teacher earning a little extra money for keeping books, there is the need for a person to handle a district's business affairs. The size of the district would determine the amount of experience and decision-making responsibility that person must have—but it would not affect the need for such a person.

COLLIER: I would basically agree with these two statements. I think there are some semantic problems involved here when we speak of a

business manager. As Mr. Hertwig said, a secretary carrying out business responsibilities in a small district is actually functioning as a business manager of sorts, even though she has no such title. From what I have seen, I would add this one rule of thumb: Anytime the chief administrative officer—whether he be a superintendent or a supervising principal—must assume certain roles of coordination of more than one school unit in a district, then he needs the help of a real business manager, one who is more than a part-time secretary.

Question 3

Can you site any specific incidents from your experience in Syosset where the business manager has materially aided the school district in a manner that could not have been accomplished without him?

HERTWIG: I don't know whether these are things that *couldn't* be done without a business manager, but I know that as business manager I am in a position to carry out certain functions that would be difficult for any other member of the admin-

istration. For example, our income does not come in evenly. At one time of the year, we do not have enough operating money—usually in the summer before tax receipts and state aid comes in. At another time, we

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What do your teachers think of your school?



Don't brush off the "prima donnas." Too often their complaints are signs of even greater general unrest. But how can you tell? Here's a way to get a true picture of teacher attitudes in your district.

In Washington, D. C., the school board kicked over a hornet's nest last spring when it attempted to revise the procedures for disciplining, suspending or firing teachers who didn't measure up to "acceptable performance standards."

In Ambridge, Pa., when the school board voted last year to eliminate the non-teaching period for high school teachers as an economy measure, irate teachers blew up a nation-wide storm by complaining to the local newspapers.

In Chicago a few months ago, the president of the 10,000-member AFL-CIO Teachers Union declaimed that teachers were avowing their "scorn and disrespect" for administrators who, they charged, were "chiefly interested in getting promoted to higher-paying schools . . . and with reports that looked good downtown [at school headquarters]."

These examples of intramural warfare, widely separated by geography and subject matter, share one factor in common: all point to a serious breakdown in communication between teachers and administrators. How can you prevent such misunderstanding, ill-will and misrepresentation of motives from cropping up in your district?

During the past decade, several devices have been built to detect

the subtle and not-so-subtle attitudes of teachers and administrators. These have ranged from simple public opinion polls, to elaborate attitude surveys and even to special personality tests which gauge such psychological factors as achievement, aggression, autonomy, affiliation and nurturance.

Top schoolmen and board officials can ferret out valuable information from such attitude studies. Results are not a helter-skelter accumulation of criticisms and gripes, for teachers and other staff members do not envision themselves as mere employees. As "professionals," they believe profoundly that they have a stake in the future of the school system—and, for the most part, they act and state their opinions with level-headed candor.

Use and abuse of studies

Attitude and opinion studies of school people have been inaugurated for a wide variety of reasons—some worthy and some wicked. And some mishandled surveys have invited petty gripes to no good purpose. In a few cases, for example, a school board has tapped the opinions of a system to accumulate ammunition with which to wage war against an administrator. In one California town, the school board and some teachers were violently

opposed to the actions of the old superintendent. An opinion inventory was used to clobber the administrator when other attempts to unseat him had failed. In a few cases, an attitude survey was made to convince town taxpayers that teachers are inveterate gripers, dedicated not to the immensely important job they do, or should do, but to their own zeal for fatter paychecks, lighter teaching loads and more status in the community.

Although annoyances and gripes do creep into some of the studies, sometimes they are valuable. Consider the complaint of the veteran elementary teacher in the Midwest. Every day, for the 20 years she had been teaching, the knob of her classroom door came off in her hand. Despite her repeated requests for repairs, nothing was ever done. She said she even gave up asking for it to be fixed about five years before she replied—anonymously—to the survey. In Los Angeles, to cite another instance, one teacher wanted to know: "Why can't all schools have a teachers' room that is pleasant instead of one that is used as a library, storeroom, PTA meeting place, etc.? Teachers need a place to relax, even if it is only for a few minutes."

But attitude studies do more than serve as a means of airing com-

plaints and grievances. Their real value to school boards and supervisors lies in the cross section of opinion they provide about the wide range of school matters which concern teachers. With such studies in hand, boards and administrators may possess a perspective of their attitudes about course content, teaching methods, fairness of teaching assignments, salary schedules, promotions, responsibility for extra-curricular activities, working conditions and relations with colleagues and superiors. One of the country's

strong and to tell top administrators how people within the system really feel about their schools' problems. Typical of the opinion-seeking statements that comprise an SRA study are those given in the chart (see page 49).

In the first big study SRA performed—in Los Angeles—the surveyors found that eight out of every 10 educators thought the opinion survey was a good way to inform the administration and let the community know what teachers thought about the schools. An equally high

a questionnaire to sample educators' opinions in 1953. The reason: the Los Angeles Board of Education was perplexed by a decentralized school system unable to cope with an exploding population, as well as by some fiery fusillades lambasting a few teachers as 'un-American' or, worse still, 'Communists.'

Beginning at 7:30 a.m. on St. Patrick's Day, March 17, 1953, Los Angeles' 13,867 certified personnel, ranging from the superintendent to the newest substitute teacher, sat down to make two million individual responses to multiple-choice questions and another 85,000 written comments. By June 1, SRA had tabulated 20,000 statistics and issued its full report to the board.

Findings of the LA study

The report disclosed how the teachers really felt about their school system. Here is a summary of expressed opinion:

1. Career: Los Angeles teachers, the survey had determined, were overwhelmingly enthusiastic about their careers. One remark culled from the 95% who found teaching deeply satisfying: "I think we have the finest school system in the world. We as teachers must impress this upon the general public."

2. Administration: Nine out of every 10 respondents expressed satisfaction with the Los Angeles program. More than 80% of the teachers were convinced of their immediate superior's fairness and tolerance. They liked working with their colleagues and they liked living in the community.

But 61% expressed a lack of confidence in board members who, they insisted, were disinterested in school affairs. A whopping 94% declared that board members should rely more upon the professional teaching staff for guidance and advice in policy-making. Whether these comments were valid or not is unimportant in opinion polling. The fact is that this is how the teachers felt.

3. Community relations: Almost 90% were convinced that local pressure groups were over-influ-



Dept. of Valid Complaints: A Midwest elementary teacher admitted in an attitude survey that every day—for 20 years—the knob of her classroom door came off in her hand!

leading educator opinion pollsters, Science Research Associates of Chicago, claims that such surveys

1. help administrators determine the combined teaching experience of the staff and
2. help create a climate of cooperation and understanding among teachers, clerks, and officials.

How the surveys work

How are areas of agreement and disagreement between teachers and administrators revealed and studied? SRA employs an anonymous opinion inventory in which participants are asked to check one of three choices—agree, disagree or no opinion—about a series of statements concerning their school district. Responses are studied to measure the morale within a system, to uncover areas in which the school organization is weak or

proportion believed real progress might be made from sensible use of survey results.

"The fact that we are having this survey is an indication of the fine school system that we have," one Los Angeles teacher wrote anonymously. "There are few places in the world where such a large body of people can express their individual opinions, with the assurance that it will be considered and evaluated. In a world of human beings it is natural that problems arise, but that is part of the challenge of living . . . I certainly wouldn't be teaching here if I didn't feel that this is the place where I am happy and doing the kind of work I like."

Los Angeles was one of the first—and one of the largest—school systems to launch an attitude survey. SRA was summoned to devise

tial. "The community," wrote one teacher, "should stop pestering the board with petty gripes and let the system move along."

4. Curriculum: Many classroom teachers, the survey found, were concerned about individual students in the awesome array of different mental abilities and emotional kinks among the system's 400,000 pupils.

"I feel that the children with superior ability are being held back," one teacher complained. "A teacher tends to slow down or grade down the work in order to keep the entire class working together. I think classrooms should be broken down into ability groups so that those who are superior can get as much as possible out of school."

More than 90% of all teachers felt more time should be made available for them to work with remedial problems. But only 27% said they thought they had enough facts, test scores, and personality data to do an effective teaching job!

5. Salary and work load: Seven out of 10 Los Angeles teachers believed their work load was about right. A solid three out of every four allowed, even when asked for anonymous opinions, that their salaries compared favorably with the salaries of other school systems—even though 60% shared the feelings of most Americans today that living costs were making it tougher to live within pay schedules.

Results of the findings

With this accurate index of teacher opinion in hand, the board was able to concentrate its energies on real, not imagined, trouble spots within the school system. One inescapable conclusion of the survey: the Los Angeles schools are, in effect, "big business" and are subject to the same difficult communication problems that arise among their corporate counterparts in industry. In explaining the survey findings to the Los Angeles board, Lyle M. Spencer, president of SRA, told them a lack of confidence has frequently been discovered in industrial firms with numerous branch offices or factories. "Many

employees," he said, "inevitably come to feel that their personal welfare does not count for much in influencing the decisions of an impersonal, distant management."

In an attempt to become more personal and less distant, the Los Angeles board took steps to widen the channels of communication between top echelons and the ranks of teachers. A direct, continuing flow of information out to every corner of the system was assured by means of regular bulletins and special memorandums about board decisions and school affairs. And a journal was published to keep teachers up-to-date on what was

going on at the "home office."

Considerable weight was also given by the board to the disclosure of the concern expressed by teachers for curriculum improvements to meet the needs of individual students. The survey was largely responsible for the board's program of curriculum reorganization which resulted in greater emphasis being placed on individualized instruction throughout the Los Angeles schools.

Survey as an endorsement

Suffern, N Y., is a community of fewer than 5,000. Dr. Lester Rounds, superintendent of the cen-



SAMPLE STATEMENTS FROM A TYPICAL OPINION SURVEY

	Agree	No opinion	Disagree
I think my work load is about right for me	—	—	—
I am satisfied with the way salary matters are handled here.	—	—	—
The superintendents and their assistants tend to ignore our suggestions and complaints.	—	—	—
The board members should rely more on the professional staff.	—	—	—
I am often bothered by unexpected extra assignments.	—	—	—
I'm convinced that my work is really worth while.	—	—	—
There is plenty of opportunity for professional growth in this school system.	—	—	—
The board members are genuinely interested in our welfare.	—	—	—
In my opinion, the salaries in our school system are lower than in most other school systems.	—	—	—
You have to have drag with the administration to get a good assignment.	—	—	—
I have to depend on the "grapevine" as my source of information.	—	—	—
Teachers should have more text materials.	—	—	—
Insufficient classroom teacher time is provided for individual remedial work.	—	—	—
My immediate superior is not very friendly towards us.	—	—	—
The adults in our community are not particularly interested in our schools.	—	—	—

NATIONWIDE PROFILE OF TEACHER ATTITUDES

The morale and opinions of teachers may be just as crucial as pay levels in securing one of the prime necessities of the nation: Quality education. Just what are their attitudes toward curriculum, community relations, administration, work loads, bulging classrooms?

To determine the answers to these and similar questions, many school leaders have encouraged candor from teachers and other staff members. One method some have used to elicit frank comments and opinions is the Educators' Opinion Inventory devised by Science Research Associates. From the response of nearly 70,000 educators this composite profile of the nation's educators has emerged:

CAREER

91% of the educators polled reported their work was "really worthwhile" and challenging.

85% said they are doing the work they liked best.

ADMINISTRATION

75% of the teachers were confident the "top brass" was doing a good job.

38% felt they were not told things they should know about new school policies and programs.

WORK LOAD

75% insisted their work load was about right, refusing to gripe about overwork—even in school systems with double shifts.

40% felt that committee meetings, teachers' meetings, and other extra-curricular activities took too much time from teaching.

CURRICULUM

85% of all teachers believed more classroom time should be allotted to remedial work.

70% were convinced that more individualized instruction is the best answer to the current clamor for a return to the basic 3 Rs.

63% wanted curriculum materials selected with an eye to real classroom needs.

GUIDANCE

68% would like pupil counseling facilities increased.

SALARIES

55% of the teachers surveyed believed their salaries were lower than those in other systems.

54% admitted they found it hard to live on their present salaries during a period of rising costs.

COMMUNITY RELATIONS

58% said school boards too often made decisions because of pressures exerted by local groups, without consulting educators.

tralized Ramapo School District #1, has probed and plumbed staff morale there each year since 1949. Most years he used questionnaires he had devised himself. But in 1957, at the urging of Professor Richard Wynn of Teachers College, Columbia University, whose studies of the Suffern school system had revealed a remarkably high morale level, Dr. Rounds submitted his staff of 140 to the more elaborate, intensive SRA survey.

"The results of this study," Dr. Rounds said, "correlated with our previous surveys and my own hunches."

Rounds has been corralling the griping and grumbling of his staff in a manner that gives him much more than mere inklings. He encourages candid comments at all times, advertises an open-door policy in his office and promises immunity from any recriminations.

SRA's Educators' Opinion Inventory administered by Professor Wynn turned up an overwhelming endorsement of Dr. Rounds' policies. Nearly 90% of Suffern's teachers have confidence in their superior and in the administration. There is a great deal of professional satisfaction, a feeling of personal freedom and identification with the school program.

The areas in which dissatisfaction were greatest? Pay, adequate provision for individual pupil differences, and opportunity for personal growth and advancement.

"Teacher salaries are universal predicaments for administrators," Dr. Rounds offers in explanation of the findings. "Pay is a touchy and thorny problem in Suffern, especially with the high caliber of people we have. And because we have such talented teachers, there is more pressure put on us, as administrators, to promote the able ones."

In justification, Rounds cited the eight holders of Ph.D. degrees on his staff and the loss of 15 first-rate teachers to administrative posts in other school systems during the past 10 years.

(Rounds anticipates more pirating of his teachers as a result of the Conant report on the American high school. Suffern claims one of the 22

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HOW TO START

A foreign language program in your elementary schools

Here's how one district went about initiating a foreign language program in its elementary schools and how it solved its biggest problem—finding enough qualified teachers.

By THOMAS TURNER

Superintendent, Santa Cruz, Calif., City Schools

■ ■ ■ I made a trip to northern Europe and Russia in the spring of 1958. Practically everywhere I found students who could converse in English. In Russia, for example, I visited a group of ninth graders studying my own state of California. They were studying the crops, industries, rivers, mountains, everything. It was all done in English. The books, the maps, the conversation—everything was in English.

The same was true in Sweden and Denmark. The students had started studying English in their elementary schools. By high school, many of them were learning a *second* foreign language and they were doing very well with it, too. I brought this information back to the parents and teachers of the district in which I was then superintendent, Pacific Grove, Calif. I pointed out to them that when a new student comes into our schools speaking only Spanish or French, it takes him just four to six weeks to be conversing in our language. Why couldn't our students in the elementary grades do as well?

The teachers and I presented this possibility to the parents. We really sold them on the importance of teaching a foreign language in the elementary grades. We did a real selling job because to make a program like this successful you must have complete community support. We are proud of the fact that when we started the program in the schools we had absolutely no complaints from any parents.

Now, what were we proposing? A regular high school course with grammar and spelling? Certainly not. That's not the way we learn to speak English. We proposed a conversational course of study. Students would talk, would express ideas in the language. The grammar and spelling could come later.

The proposed program

Of course, the type of language program will vary from district to district. For one thing, the language to be taught will vary. We believe that any language can help. Re-

search has shown that a student learning a foreign language when he is very young, in the elementary grades, will have much less difficulty learning *any* foreign language when he is older. If Polish, for example, is spoken by many residents of an area, it would make sense to teach Polish in the elementary schools.

In our school district, Spanish was the foreign language spoken by most of our bi-lingual residents. We proposed to bring it into the schools in the following manner:

In the primary grades we would not teach Spanish as a special sub-

Dos y dos son cuatro, two and two are four; Dos y cuatro son seis, six.

$$\begin{array}{r} 2 \\ + 2 \\ \hline 4 \end{array} \quad \begin{array}{r} 4 \\ + 2 \\ \hline 6 \end{array} \quad \begin{array}{r} 6 \\ + 2 \\ \hline 8 \end{array}$$



Students learn the Spanish names for numbers in arithmetic.

"It is agreed by foreign language teachers that a person who has mastered one foreign language is in a position to learn a second with far greater ease than would otherwise be the case. This fact is true even if the second language is unrelated to the first."

DR. JAMES B. CONANT

"The American High School Today."

ject. Instead we would want it to become a part of all the subjects being taught. For example, in the morning we would give greetings and directions and make announcements in Spanish. These would be repeated in English. Idiomatic expressions would be taught and used. In arithmetic, students would learn the Spanish names for numbers. In social studies particularly, there could be oral discussion in the foreign language, followed by an English translation. It ties in particularly well there. Of course there is a danger of losing students if you're not careful. But by repetition and awareness of the youngsters' ability to understand, you can overcome this.

By the fifth and sixth grades the language might better be taught as a special subject. We thought that by then students would already have a basic conversational knowledge of the language. At this point we could start in on reading, writing, spelling and even perhaps the grammar of

the language. But the emphasis still would remain on conversation. Students would learn to speak and think in the language, just as they do in English. Then they would learn to spell it and to construct sentences properly.

Who should teach?

The biggest problem in starting a foreign language program in the elementary school is finding teachers. We solved this in three ways.

First, we began by making use of the youngsters in our schools who spoke a foreign language. We got them to develop language conversation with the rest of the class. Instead of being faced with derision of their ability, as, unfortunately, so often happens, students who could speak a foreign language were appreciated. They were honored for their ability to speak another language.

We also asked our teachers who spoke Spanish to use it in the classes. Again, this was not on a formal basis. They were simply asked to use phrases with which they were familiar. We knew that we wanted to institute a program along these lines three years before we actually got into it. For this reason we had been hiring teachers who had a speaking knowledge of Spanish. So this gave us a fairly strong nucleus of teachers capable of at least giving direction in the language study.

Finally we turned to the laymen in our district. Many of them are foreign-speaking nationals who have had an education and who are capable of teaching in the schools. Even if they are not actual teachers, the experience of hearing and pronouncing the words is the impor-

tant thing at this time. If we could bring some of these foreign speaking people into our schools and just let the students hear them, it would be a worthwhile experience.

We also went to colleges with instructors who had foreign backgrounds and asked them to address our students.

Actually, we were in a fairly good position. We had enough teachers to get started in this program without too much difficulty. And we got a tremendous amount of help and sound advice from native speaking nationals in this community. They gave an immediate and overwhelming response to the fact that we were instituting the program. I would imagine that any school district that asked for help in this area would be inundated by the response.

Training teachers

But we were not content to rest on the teachers that had had a background in Spanish, the laymen in the area and the students who spoke the foreign language. We asked our other teachers to go to school. Pacific Grove has 2,200 elementary students and 80 teachers in five schools. Of those 80 teachers, 18 have a speaking knowledge of Spanish and 30 more voluntarily went to school for two semesters to learn the language.

Here we were luckier than many school districts. We are near the Army's foreign language school and we asked their help. They arranged to teach Spanish to our teachers at night. We knew that the Army had developed the most modern methods of rapid teaching of the language so this help was invaluable.

Our teachers, under the direction of the Army language school instructors, took the courses in the evening at the Monterey Peninsula College. The administration of the college became keenly interested in the program and set up courses for college credit for those teachers in attendance. We also gave them credit on our salary schedule for their work. We found that teachers who had had some background in the language were able to bring material into the classroom within two months of the time they started with

"Vivi en Mexico por varios años"

"I lived in Mexico for several years"



We utilized children who had lived in other countries

the Army course. Other teachers studied four or five months before attempting to bring the language into the classroom.

Teachers do make mistakes in pronunciation sometimes. And it has happened that native speaking youngsters in the classrooms have corrected them. This has inhibited some of the teachers, who don't like this type of criticism, but it has hardly been a serious problem in the program. The basic rule is "don't make sentences unless you know they are right." Teachers don't attempt to be experts in one semester. They make few errors in construction because they don't try to construct a sentence unless they are absolutely sure of what they are doing.

Even with this training there aren't enough teachers in the Pacific Grove program to go around. As a result, some youngsters will miss the opportunity and some will not get enough. But whatever experience they get will be worthwhile.

In the intermediate grades, where the subject is more formalized, teachers often trade classes to teach the language. After all, we have specialists in music who take that class for teachers who are not capable in the subject. Why not have the same thing in Spanish?

Pacific Grove has a plan that will provide Spanish specialists for those grades. They will go from class to class, from school to school, teaching the language. They will supplement the classroom teacher, or, when the teacher does not speak Spanish at all, they will give the students the only experience in the language. We believe that a little exposure is better than none. Even if a student gets a Spanish-speaking teacher only one semester during the six years he is in elementary school, we believe that that little bit of opportunity is of value.

Ideally, I would like to have a 13th teacher in a 12-teacher school who would be a specialist in languages. She would start in the fourth grade and devote three 30-minute periods a week to each class.

But I think a school district could start a program as soon as it gets a nucleus of teachers capable of teaching any language. They can swap classes to give greater coverage. Of

y ahora agachese, y toquese los pies
now bend down, and touch your toes



Morning exercises greetings, announcements and directions are given in Spanish

course, if you want a continuing foreign language program in your elementary schools you must develop a program of teacher training. This training can be provided by foreign speaking nationals in your community, by nearby colleges, or if you are as fortunate as we were, by an Army language school.

This problem of getting teachers who can speak the language is less than we expected. Many of the teachers in Pacific Grove became so enthusiastic over the idea that they are going on to take more courses in the language. Many of them this past summer went to Spain, to Mexico, to South America where they could get greater experiences in the language. I think that once something like this is started in the schools, the enthusiasm of the com-

munity, the students and the teachers will make it a continuing program.

Actually a much more important problem to be solved is the development of a good course of study for teaching foreign languages in the primary grades. We need continuity. We need purpose and organization. County and state units are going to have to take the lead in this development.

Despite all the problems—the lack of teachers, the lack of time, the lack of a program—there is no question in my mind after our experience in Pacific Grove, that foreign languages can be taught in the elementary schools. And that it is something definitely valuable and worthwhile for the school district, the citizens and the students. **End**

"... there can be no question that children learn foreign languages more readily when they are young . . . one can watch with interest the new developments in foreign language teaching . . . which, it is hoped, will result in a considerable proportion of the eighth-grade students having a speaking knowledge and some degree of reading knowledge of a modern foreign language." 1910

the facts about modular construction

■ ■ ■ When a report reached the East recently of a California school that cost \$172,000 less than its estimated price, SCHOOL MANAGEMENT dispatched an editor to Palo Alto, Calif., to find out from the architect, (The Office of Ernest J. Kump, Architects and Planning Consultants) just how it had been done.

Was the school a bad school? Did it fail to come up to proper educational standards? Was it made of inferior materials? The answer to all of these questions was "no."

What then had caused this low price? Simply stated, the architect had used what has come to be known as "modular construction."

What is modular construction?

Modular construction is the name given for any kind of building that uses a repetitive dimension throughout, thereby cutting down on the number of different measurements that must go into the building.

For example, instead of having cabinets three-and-a-half feet wide and others four-feet, five-inches, all cabinets are constructed to correspond to a single, repeated, dimension.

This dimension can vary. It might be one foot, it might be the length of a brick. In general, in modular construction, it has been standardized at four inches. In other words, every dimension of every part of a building is a multiple of four inches.

What does this mean in terms of costs? If a contractor knows that he will have to install cabinets,

doors, windows, of only one size—or a multiple of one dimension—he can save money on ordering, storing, classifying and constructing the various parts. These savings can be passed on to the school district for which the building is being constructed.

The space module

But few school districts would be willing to construct a school based on its dimensions alone. Other factors—heating, light, color, the use to which the building is going to be put—must be taken into consideration.

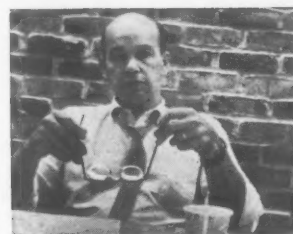
Out of these considerations has come the "space module concept" pioneered by Architect Kump. The space module principle, according to a research report prepared for the New York State Education Department, (see "*School building costs can be cut*," *SM*, Aug. '59), "embraces more than the application of modular components, although their use is an essential part of the concept [it] is a 'block of space' which is used repeatedly throughout the plant, thus multiplying the total repetitive elements. All environmental control factors are built into the structural shell. The interior space is left free for division in any way desired. Thus the concept combines flexibility of educational space with a maximum use of repetitive components."

In this tape-recorded interview, Architects Ernest J. Kump and James Fessenden, partner and chief project architect, discuss the space module concept, how it evolved, how it is used and what it can mean to school construction.

When SCHOOL MANAGEMENT heard about a school in California that was bid \$172,000 *below* its estimated price it dispatched an editor to find out from the architects how it was done. Here are their tape-recorded answers to the question "How can you build a high quality school on a low-cost budget?"



Ernest J. Kump



James Fessenden

Q *Mr. Kump, if you standardize a building to a single modular dimension, aren't you apt to produce a pretty monotonous and sterile environment?*

KUMP: No. The ultimate objective of modular construction is to standardize as many of the components or parts and materials of the building as possible. That means repetition. That means mass production. That means economy. But it needn't mean monotony. It's true it defeats itself unless, within the modular system, you have enough variables. If the limitations preclude variety, you get monotony. Naturally, if you have just one window of one width of one height, and one size wall panel without variation, it would have implications on design that we would not like. But we don't admit that standardization—with all of its potential savings—need produce a sterile environment.

Q. How does modular construction save money on such things as sinks,

cabinets and other work that is put into the school?

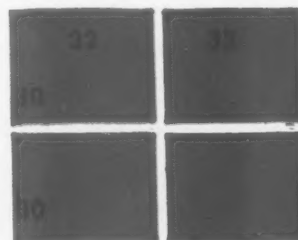
FESSENDEN: Well, you get savings through simplification of the variety of all the parts. Let's take doors, for example. Previously, in school building construction, there would be a door three-feet, four-inches wide for a classroom. The office door would be two-feet, six-inches wide. Closet doors might be two feet. With modular construction, you would take one door. For example, a three-foot door would be adequate for the classroom and adequate for the closet and adequate

for the office. You would have to make only one size door opening. It results in savings. Not only do you have to jig up and produce just one size door, it also means great savings in the ordering, shipping, classifying and crating.

Q. But how do you relieve the monotony of this sameness?

KUMP: What we have just described is known as dimensional modular design. Dimensional modulation is based purely on the function of measurements, the standardization of measurements. It has been planned without regard for total

The
basic
space
module



This block of space is the basic space module. At right it is formed into four equal classrooms. For other divisions, turn page.

integration of everything to enclose a space and make it useful.

FESSENDEN: The architect's objective in any building is a *space environment*. In other words, the building is not complete, is not useful, unless it has more than walls and ceilings.

KUMP: Yes. Architecture is more than just shelter—we have to provide a space that has proper lighting, air conditioning, accoustics and all of the elements, even the proper color as it affects human beings working in the space.

Q *In other words, you are talking in terms of volume, of cubic feet, instead of square feet. Is that correct?*

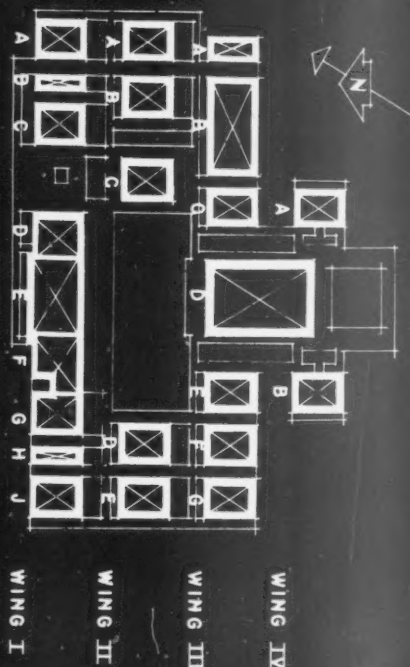
KUMP: From the point of view of dimensions, we're talking of cubic feet. But you can't express the *quality* of that space, the environment, in terms of cubic feet, can you?

FESSENDEN: I think the best example to try to get this into laymen's language is probably a comparison with Pullman cars. The cars are designed to standard units. They have a standard shell and that shell has its own heating system, lighting system and plumbing system. Now you take the standard Pullman car shell and make it into a train. That train requires a dining car. It requires sleeping quarters. It requires living or social quarters. It requires sanitary facilities. You can take a basic Pullman shell—a complete building in itself—and make it into a bar car, or a sleeping car, or a dining car with a cocktail lounge. You can change the inside, but the outside, the basic space module, is always the same.

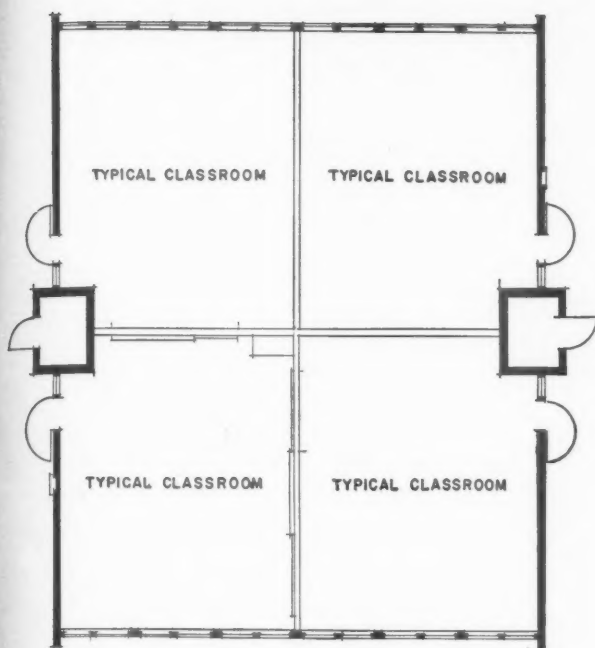
Q. Have you a standardized space module for schools?

KUMP: Yes. For instance we know from experience that there are basic functional requirements at the elementary level, the junior high school level, the secondary level and the college level. We have found from research and study that when we repeat these basic space modules, we can accommodate any educational function of the school building

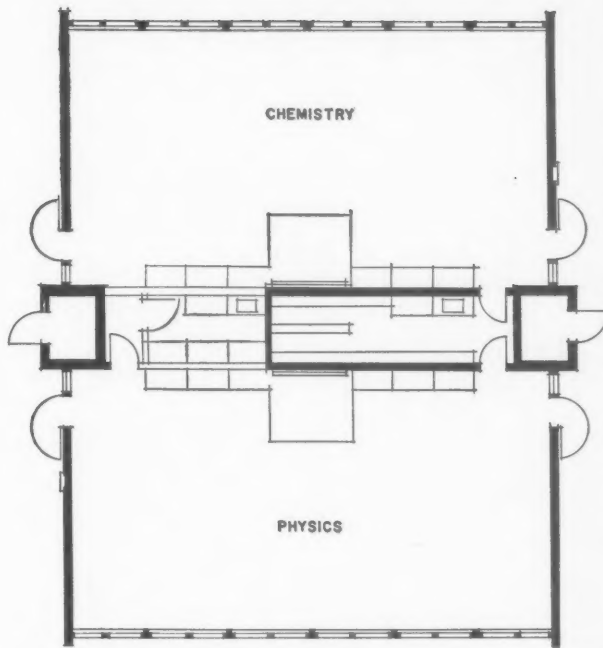
THE SPACE MODULE CONCEPT APPLIED TO PIONEER HIGH SCHOOL, SAN JOSE, CALIF.



Use of the space module concept in the Pioneer High School, San Jose, Calif. (above), resulted in a savings of \$400,000 to the district. The architects were able to encompass almost every school function in some multiple of their basic space module. In this case 52 by 60 feet. In some instances the module stands as a single building. In others two and four have been strung together to make one large building. Laboratories were provided by dividing the space module in half. Only the gymnasium (Wing III, Building D) is not built to a dimension of this single space module. For some of the ways in which this space was divided, see diagrams at right.

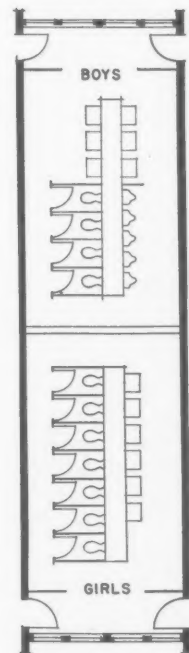
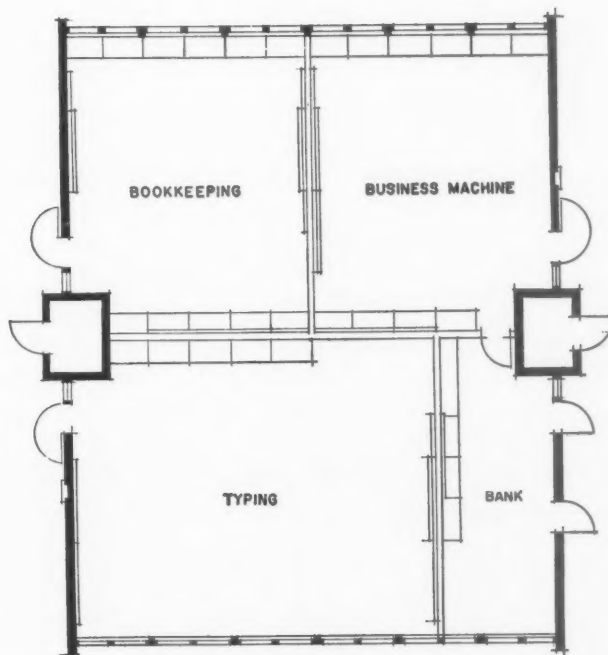


Typical classroom unit divides the modular space into four equal classrooms, each containing 780 square feet.

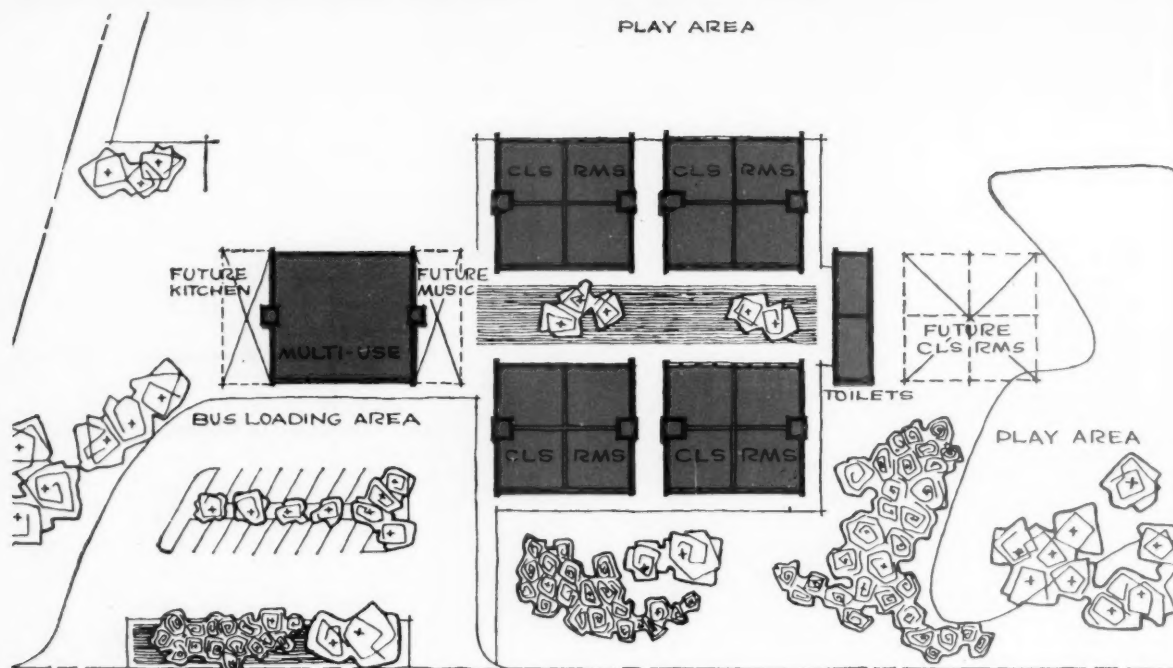


Science unit is housed in basic module. Space has been divided into two equal rooms with storage area between.

One-and-a-half units house commercial unit, lavatory facilities



Commercial unit demanded rooms of varying dimensions. By moving interior partitions, architects were able to satisfy all needs. Large typing room is 30 by 38 feet, will hold 40 students. Bookkeeping and business machine rooms are standard 26 by 30. **Lavatory unit** and corridor connecting it to commercial unit are housed in half a standard space module.



MASTER SITE PLAN FOR BROCCOLI LANE ELEMENTARY SCHOOL

A good example of how the space module principle can be applied in an elementary school situation is shown above. Note that five separate buildings, four of them of the same

overall dimensions, one half that size, have already been constructed. Other facilities can be easily added later. Basic module in this case is 60 by 64 feet.

within that space. It does not limit the educational program.

Q. What is the size of this module?

FESSENDEN: It will vary for different kinds of schools. In our experiments we have arrived, for the elementary school, at a basic space module of 60 by 64 feet. We studied the schools we had built in California and along the West Coast. We found that in the average elementary school in the West there was usually a multi-use room, a kindergarten, administrative offices and standard classrooms. We found that the 60-by-64-foot clear span as a space module shell would accommodate practically all the functions. For example, that size space module, if you didn't put any partitions in it, was a clear span for the multi-use room and cafeteria. You could divide that same shell into four classrooms. (*see diagram, page 55*).

Q. This space module that you describe could be divided into four classrooms, each 30 by 32 feet. Laymen generally are told that a square is the most economical and perfect way to build. Why not make this space module 64 by 64 feet or 60 by 60 or 62 by 62?

KUMP: Sixty by 64 is close to a square and there are technical reasons and limitations that brought us there. Everything has to be tempered due to other factors. If we disregarded existing manufactured products and came up with an ideal dimension for a space or a building, it would cost many times more than the slight tempering we have to do to take advantage of what's on the market. The square has many advantages, the first being that it is the most economical form to enclose, using the least amount of exterior wall. But, as we indicated, the mate-

"There's no type of building, material or construction system that could not utilize the space module idea."

KUMP



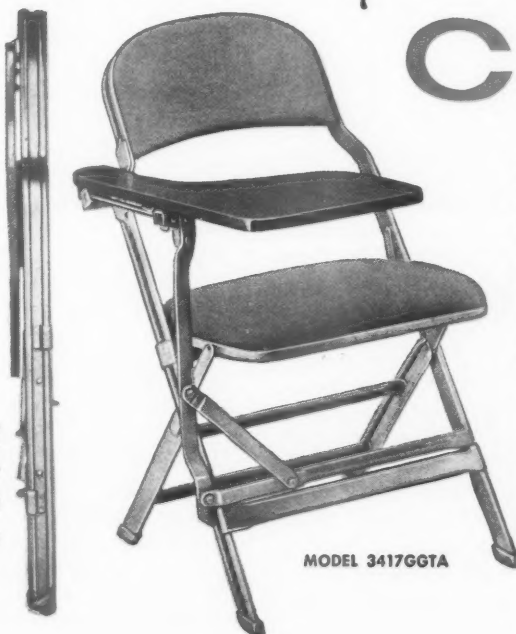


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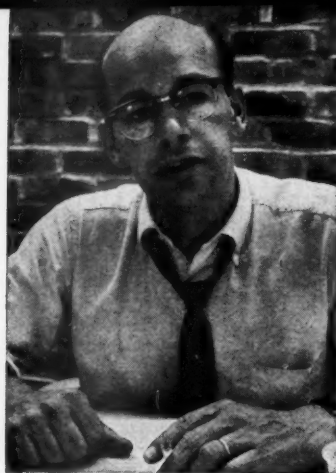
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FESSENDEN

rials that we are working with made this size a more usable one.

FESSENDEN: Another factor here is that the other size spaces you have described, the 60 by 60, 62 by 62 or 64 by 64 squares, would not suit our needs as well. In an area 64 by 64 you would have an unnecessary strip four feet wide by 64 feet long. It's just not needed. That's a lot of expense to go to to obtain a perfect square. The other ones would not give us any one dimension long enough to encompass all that we wanted to be able to encompass in the building.

Q. What is your module for high schools?

KUMP: It is 60 by 52 feet. In the high school you have more variety in the size of rooms. You need large science rooms and small English rooms for 20 students. You need classrooms for 30 and lecture rooms where 100 or more can be seated.

FESSENDEN: Of course at the high school level things become somewhat more complicated. We may use more than one basic space module for a school because we need two or three to accommodate all the functions.

Q. Doesn't this begin to cut down a little on your savings?

FESSENDEN: It might as compared to a school where you could use just one space module for everything, but it gives you a much better and more flexible school. Savings, after all, aren't the only consideration in building a school. You can save a lot of money by building a school in a certain way and then discover that it is useless for what you want to do in it. This is false economy.

Q When you speak of a space module, are you talking in terms of a separate self-contained building?

KUMP: We are talking in terms of self-contained space. In other words, these could be separate buildings. If you put two of these together and left out the partitions between them, these two spaces would make one building. The space would be continuous, with a supporting system of columns between. (See diagrams, pages 56 and 57.)

Q. Then we are not talking necessarily about separate buildings, 60 by 64 feet or 52 by 60?

FESSENDEN: No, not necessarily. On one site we might use a group of individual buildings. In another we might combine two, three, four or more into a single building. In other cases, we'll use a combination.

KUMP: And this can go in any direction. You can use four of these spaces in a single line. You can use four of them to form a square. You could build up vertically by adding more of these spaces.

Q. Do these buildings all have their own individual heating plants and plumbing?

KUMP: First let me correct the word building. It is not a building. It is a module of space, because the minute you call it a building you think in terms of prefabricated individual buildings that you are placing around. But that is not the concept at all. The concept is a modular framing system of roof and floor and supporting columns, and your heating plant and electrical system and plumbing are integrated on a modular basis to accommodate this space.

Q. Let's take the case where you put two of your "spaces" together. Does each one have its own separate heating plant?

KUMP: That's right. Each volume of space, what we've modulated, has its own heating system, electrical system, and structural system. In

other words, we put in a heating unit and an air conditioning unit to heat and condition a volume of space 60 by 64 feet by, let us say, 10 feet high.

Q. Where do you put this heating plant? Underneath the building?

FESSENDEN: That's a technical question. We have many places. It's such a small unit when you modulate it. And with the technology and the heating and air conditioning today, it requires little if any additional space.

Q. Don't you have to make some kind of an excavation for it?

KUMP: Well that depends on the type of system. For instance, if we use a reverse cycle compressor heating and cooling system in one unit, that takes one amount of space. If it's a gas or an oil unit or the different fuels that affect the size of the equipment, it takes a different space. Some units just sit on the roof, for instance, without any building at all, but a waterproof housing. Or they can be under the floor, or in the wall.

Q. Wouldn't it be cheaper to put in one large heating plant instead of individual units?

KUMP: No. The unit heating system, is cheaper than the central plant and it has less equipment, fewer motors and is cheaper in operation. That is what our studies have shown from actual experience.

Q In other words, you could have four, five, or 10 small plants and they would be cheaper than one large plant to heat the whole area?

FESSENDEN: That's right. There are more motors and complex parts in the central plant than there are in the decentralized plants.

Q. Wouldn't it be easier for the maintenance people to have only one heating plant to tend?

KUMP: On the contrary, it's much



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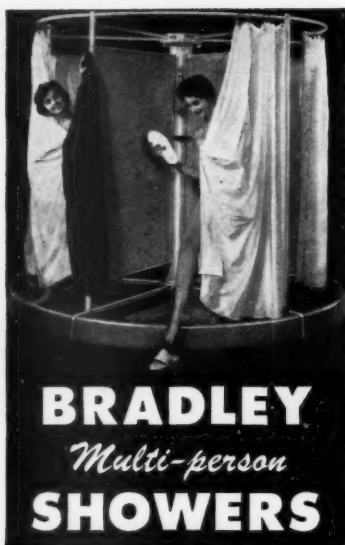
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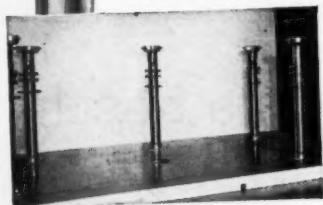


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easier for them to maintain these small ones. They are like residential units, much less complex and it does not take specialized knowledge on the part of the maintenance man. Central plants, in many cases, take a permanent engineer with highly skilled knowledge. And remember, with these smaller units, you can save money by heating one area of the building without having to heat the entire plant.

Q Let's turn to the question of walls. Let us assume that you were building these space modules as separate 60 by 64 foot buildings. That means that you have to build four exterior walls around each. Wouldn't it be cheaper to put some of these walls together?

KUMP: Well, that would depend on the problem and the character of the school you are trying to create. The space module principle does not preclude making a loft-type building, for instance, under one large roof, because again it's not a definition of an individual building. It's a structural system of space.

FESSENDEN: There are many factors to be considered. For example, on a rolling site it would probably be much cheaper to build individual schools. You can avoid a lot of excavation that way. There might be artistic reasons why you would want to have separate buildings. In one school you might have some separate buildings and other buildings in which a multiple of space modules have been put together for different purposes.

KUMP: Also insurance costs may make it more practical to build smaller buildings. A fire or other calamity in a single building would not, for example, affect the other buildings in the group. And when you build one large building you may eliminate exterior walls but you have to install many expensive fire walls.

Q. Does your space module principle allow for much flexibility in the buildings?

FESSENDEN: That's one of the great beauties of the system. Not only can

we partition differently inside each of the space module units, we can construct them as independent buildings.

For example, we may construct an elementary school with three of our 60 by 64 foot spaces. Let us assume they're in three separate buildings. Two years later, if the district wishes, it can add a fourth with no trouble at all. So it makes for great flexibility both inside the buildings, in the way we divide the space, and in the school as a whole, in that we can add buildings at any time we wish.

Q. Mr. Kump, can you envision any building which could not be constructed through the use of the space module idea?

KUMP: No. There's no type of building, no type of material or construction system, that could not utilize the space module idea.

Q. Are any other architects using the space module concept?

KUMP: Not to my knowledge. I don't think that architects as a whole understand it. They still do not grasp the concept of the space module as a three dimensional idea. The average architect thinks usually in terms of a standardized building rather than a space module principle that can be used for any type of building at all.

Q How much can you save with this kind of construction as opposed to more conventional school construction?

KUMP: I don't think that I can categorically answer in view of our experience to date, but it appears to us that we could save up to 15% of construction cost. That, we feel, is conservative.

FESSENDEN: I can give you one example. The State of California makes very austere estimates for state aid. It estimated that a high school we built at San Bruno should cost about \$1.4 million. We came in with a building that cost \$172,000 less than that. In another instance, very recently, a school estimated at \$2 million was bid at \$1.4 million. This is real economy—economy that was attained without any loss of quality. **End**

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Why not destroy your teachers' registers?

Here's one low-cost way to rid your schools of the messy problem of retention, storage, and use of records that the law says cannot be destroyed.

By HERBERT POPENOE, *Director*
Administrative Services Branch, Los Angeles city schools

■ ■ ■ Retention of elementary teachers' registers is a problem faced by almost every school district. Most states require that they be retained indefinitely so that questions about former students relating to birthdates, attendance, scholastic achievement and eligibility for citizenship can be answered.

Even a new school system soon finds these registers occupying hundreds of cubic feet of storage room. Moreover, they are often scattered through several schools, making central office use difficult.

The Los Angeles city schools were inundated with 430,000 elementary registers going back to 1863. These invaluable, but seldom-used, books were occupying 60,000 cubic feet of storage space scattered throughout the system's 6,157 buildings. At best they were almost impossible to use.

Los Angeles had, for several years, microfilmed secondary cumulative record cards and other materials to save time and space. Courts and other agencies had approved photocopies from microfilm as fully acceptable legal documents, and colleges and universities gladly received such transcripts. It was decided that elementary registers could be put on microfilm, too.

Putting records on microfilm has many advantages. First, they save space. A reel of film, weighing slightly more than four ounces, can take the place of a half-mile of documents laid end to end.

Microfilming is also a safeguard. Film can be easily stored in fireproof containers. With an easy-to-use viewer, such as most public libraries use for searching through old newspapers, the microfilm is enlarged to a proper reading size. At the same time, there is no danger of tearing or otherwise mutilating the original records. And the problem of fading records or brittle paper is also eliminated.

Getting underway

In Los Angeles, elementary teachers' registers come to the central microfilm office school by school. Each school's registers are first carefully checked to make sure that they are filed correctly. This is an essential step, particularly with older records, as these may have been misfiled some time in the past.

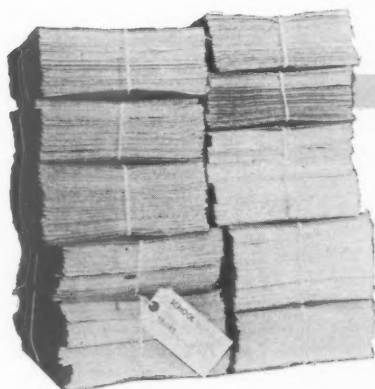
Because of the sheet size of the registers, each book is handled individually. The staples are removed and the book is cut along the folded edge with an ordinary photo-trim-

ming knife. The sheets are maintained in proper sequence.

A stack of cut registers is then given to an operator, who drops the cover of the book into her machine to record over-all data regarding teacher and school and then follows with all pages containing data from the register. The microfilm machine can be set to microfilm one side of the page, and then automatically reverse the sheet and microfilm the other side. A record is kept in a notebook by each operator of all pertinent information identifying the records, and this is typed on the label of the film box for reference.

The films are picked up for processing each day and returned the following afternoon. Each film is then scanned by use of a viewer to make sure that every page has been properly microfilmed, and to find any blurs or turned corners of documents. If any such are found, the original sheets, which are retained for a day, are pulled, set aside and re-microfilmed for splicing to the end of the reel. Then the original registers are destroyed.

The size of documents may be reduced by ratios running as high as 40:1. Experience has shown that such a high ratio is economical, but



Stack of registers, (above), is microfilmed by operator, (above right), then sent out for processing. Developed film is scanned for errors.

that the record as microfilmed is too small for ready reference. Current practice is to reduce at a 24:1 ratio, and then to enlarge on the viewer at a 1:40 ratio. This permits examination of a record on the viewer that is more than half again as large as was the original document. A reel of film at a 24:1 reduction contains documents the equivalent of more than an average file drawer. An operator averages from one to two reels a day, depending upon the size and condition of the documents being microfilmed.

How is it working?

Microfilming of elementary teachers' registers was started in January, 1959, when two operators and two microfilm machines were assigned to this job. During the next six months approximately 50,000 registers were processed. The original 430,000 registers, which occupied 6,000 square feet of floor space, will eventually be housed in microfilm cabinets occupying only 60 square feet.

Savings will be comparable to experience with secondary records, where 50 years of pupil records at one high school had been placed on 55 reels of microfilm, weighing only 14 pounds, at a cost of \$672. Floor

One small box, (right), contains all material from stack of registers. Viewing, copying, are easy through machines that magnify film.



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space valued at \$30,000 was released for other uses.

An average of 20 requests to search elementary records are received each day. Search time among the well-indexed films is less than half what it took to search through the registers themselves.

How much does it cost?

While Los Angeles is now using eight microfilmers, seven viewers and a staff of 12, the work was started five years ago with only one operator, one microfilmer and one viewer. Such minimum equipment has been found entirely adequate by several smaller school systems in California.

A number of companies offer microfilming equipment which can be purchased or rented. Los Angeles finds rental advantageous since older machines can be discarded or replaced with newer models and there is no charge for maintenance or repairs.

A microfilmer, which will photograph one or both sides of each document, can be rented for \$50 to \$75 per month. Two cameras in the machine expose two rolls of film simultaneously if desired, thus providing a duplicate set of records. (This is better protection against fire or other hazards than is possible with the original records.)

A row of buttons on the machine provides for proper exposure of documents on papers of different colors. Automatic feed, which exposes 200 to 600 documents per minute when size and paper stock are constant, is optional.

A viewer, which is really nothing more than a photographic enlarger, can be rented for \$5 to \$8 a month. The viewer is also used for making copies for court records, transcripts and similar purposes. A sheet of photosensitized paper is placed in the viewer, the viewer light turned on for about 20 seconds, and the photocopy is then treated with developing solution, placed in a fix bath, washed in water and run through a dryer.

A 100-foot reel of microfilm (virtually identical to 16 mm. "home movie" film) costs about \$4.15 including developing and processing. Experience in Los Angeles has shown that the total cost of a reel of microfilmed documents, including purchase of film, rental of equip-

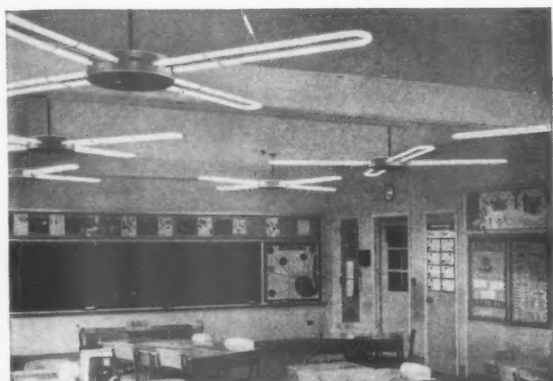
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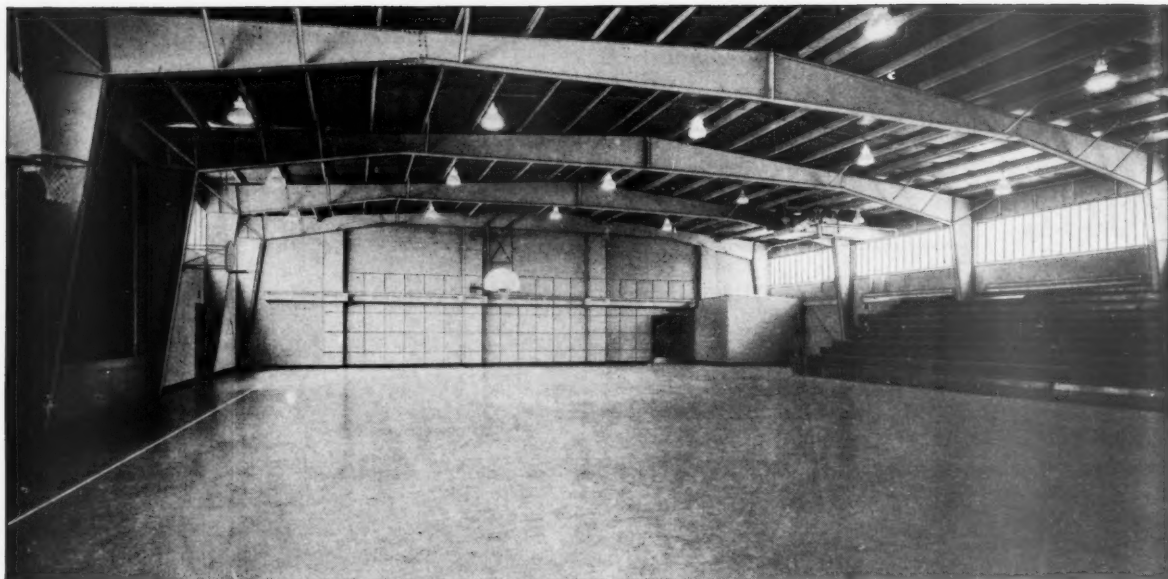
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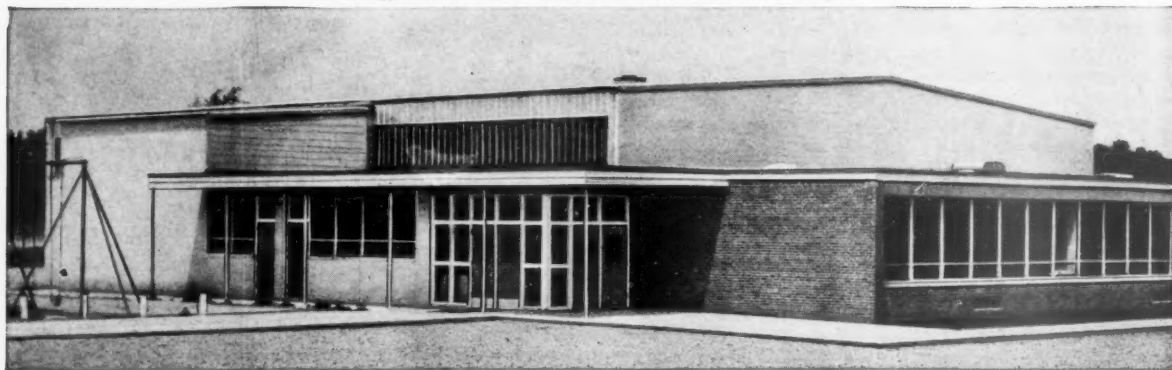
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ment, and personnel costs, averages slightly more than \$12 a reel. Thus the contents of a four-drawer filing cabinet can be microfilmed for about \$45, less than half the cost of buying another file.

Salary costs, of course, depend on local wage scales, but a competent operator probably will be paid slightly more than a clerk-typist.

The film is as easy to load as in an ordinary camera. Anyone can learn to operate the machine, which is virtually automatic and foolproof. Actually all that needs to be done is to drop the document in the machine. The machine does the rest, gripping the document, turning on the exposure lights, carrying the document through and returning it to a stacker.

The most essential requirement is to select operators who will pay careful attention to all documents that are fed into the machine. This is a rather monotonous task but a very important one. The accuracy of every document on the film must be scanned and double checked before the original records are destroyed. Good operators and competent supervision guarantee outstanding results.

Centralized microfilm office

Unless records are needed by the originating office for continual reference, they can well be centralized. Inquiries received frequently involve reference to a number of schools in order to obtain a complete individual record. When records from all schools are available in a central office, this eliminates communication problems.

Members of the central office staff are acquainted with all records available, have developed skill in making searches and photocopies, consider such activity their normal and accepted responsibility and take pride in their work.

Other microfilm uses

It has been mentioned that secondary school records as well as elementary teachers' registers have been microfilmed. In addition, the pupil record and microfilming section has microfilmed materials for junior colleges, adult schools, the personnel division, guidance and counseling offices, health services, advisement service, board of education offices, retirement section, and

child welfare and attendance branch.

Microfilming has proved to be outstandingly successful in the Los Angeles city schools. It is being used with excellent results in several smaller school systems nearby. It saves time, money and floor space in almost any school district, regardless of size.

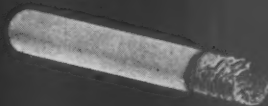
A centralized microfilm office relieves administrators and other school personnel of duties which to them are burdensome. Those seek-

ing reference to records are given attention by skilled and specialized staff members. Absolute accuracy through photocopies is assured; there is no need for typing, checking or proofreading.

Any school district that has problems regarding the storage of records might well consider microfilming. **End**

For more information on microfilming school records, circle number 839 on the Reader Service Card.

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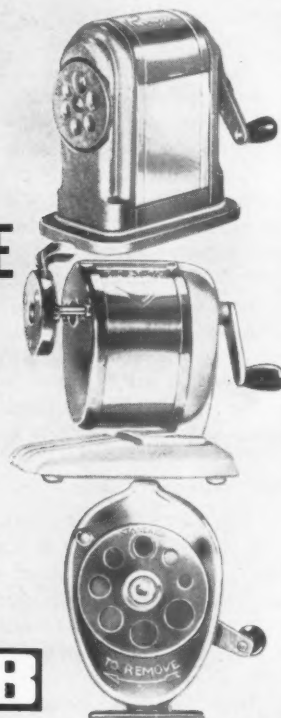
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SCHOOL MANAGEMENT

You can put the law of Supply and Demand to work in your district—and save money. Here's what one district has learned about bucking the seasonal ordering peak.

How Burlington gets a

15%

discount

buying

“out-of-

season”

■■■ In most school districts, buying for the next school year takes place the preceding spring. At that time, the conventional practice is to have each school in the district compile its needs for the next year. These individual school reports flow into the district office where they are merged to produce a budget forecast.

Conventionally, it is only after the budget has been approved that orders are actually placed for delivery the following September. District personnel often submit their needs for competitive bidding as late as June. It is not uncommon to have substantial orders going out in July for delivery only 60 days later.

It isn't difficult to imagine what happens to the manufacturer of school supplies and equipment in this situation. Take the manufacturer of classroom seating, for example. The bulk of his orders come in during May, June and July. His factory is working on a 24-hour crash basis for about a third of the year. The rest of the time he builds conservatively to establish a modest inventory against orders he tries to anticipate for the following spring. This is obviously an uneconomic marketing method—and it was with this in mind that the Burlington, Vt., school district began several years ago to look for a method whereby it could capitalize on the situation.

The Burlington buying schedule

Under the direction of Patrick Williams, superintendent of buildings and grounds, Burlington set up

a new purchasing calendar that phased its buying throughout the year. The basic idea was to buy different items at different times—in each case selecting a time of year that would offer a combination of the best price potential and the best accommodation of the district's needs. The purchasing calendar starts in January (*see box page 72*). Right after the first of the year, each of the schools begins to compile its needs for instructional supplies. It is interesting to note that these requests are only for “unusual” items. Thanks to a carefully managed inventory control at the district office, Williams has an accurate picture of the usage of common items over the last several years. Working with this information, he knows, for example, how many reams of duplicating paper will be used at any school in the following 12-month period. So long as the school population remains the same, there's no need to ask each school to give him an estimate of needs for these common items.

With all the information in hand on needed instructional supplies in January, it's possible to send the bids out in late January and early February.

Under this system, it's important to recognize that Burlington takes virtually immediate delivery as soon as contracts are awarded. In effect, the “replenishment date” for instructional supplies is the spring months, rather than September. As Williams states it, “Why should we be pinned down to any particular school year, let's say from Septem-

ber through June? It's a ridiculous buying cycle and there's no need for it. Moreover, by taking spring delivery, we eliminate the confusion of getting stockrooms filled in early September when school opens. In September, the storerooms are filled and ready for use."

Why were January and February chosen for the buying of instructional materials? Says Williams: "The purchasing calendar is still an experimental one, and we plan revisions based on known factors and trends. But, we know that most manufacturers base their marketing program on the time of the big national conventions in February and March. It's the exact time when they are sitting stagnant. They know what their new products are going to be and they have begun to build up their own inventories which, incidentally, are gathering dust on the shelves. It's important to remember that their new products and materials are usually developed and ready for market six months prior to their being available to the general public. During this slack period—and this is important—suppliers haven't established their price trend for the year. Each fellow is wondering what the next man is going to bid. Schools placing bids then get a break simply because industry's suppliers don't know what competition is going to be at that time."

Williams points out that there's very little chance of paying too much at that time. A supplier recognizes that future orders will be compromised if he comes in too high.

Williams states categorically that he saves from 15% to 20% on al-

most every item purchased out-of-season (except items like textbooks, which are fair-traded).

Burlington has found that most suppliers and manufacturers are willing to be very flexible on deliveries. Classroom furniture, for example, is purchased in late March. If it's for new construction, Burlington asks for delivery timed to the completion date of the job. If it's replacement furniture, the district asks for delivery shortly after school is out. The manufacturers are generally willing to delay payment, without sacrificing discounts, until after delivery or longer. It's not uncommon to get July 1st billing for an order placed in January. Even then, the supplier is in the enviable position of having cash in July to work with during his summer months of peak production.

Mr. Williams points out that Burlington has a fiscal year beginning July 1st and running to June 30th of the following year. Thus, the district generally purchases in any fiscal year the materials that are actually going to be used that year.

The purchase of custodial supplies is somewhat different. Bids are awarded in August for delivery in September or October. These are paid for fairly promptly since it would be unfair to expect a supplier to wait until the following July for payment.

How to get started

SCHOOL MANAGEMENT's editors asked Mr. Williams and Superintendent William Logan what they would recommend to a school district as a method for getting started

on a year-round purchasing calendar. Both suggested that it would be well to start with instructional supplies. First, an early-in-the-year date is the best time to take advantage of the market and, second, these are the items that are most critically needed when school opens in September. Says Logan, "instructional supplies are a major consideration in your budget. If a district must plan its budget for March or July, and if it knew what it had to order in January, it would know what its commitments were going to be. The administration could plan its budget accordingly. It knows the extent to which it is going to be encumbered for essential materials."

Inventory control is essential

Burlington maintains a perpetual inventory control on visible record-keeping equipment. Every time that an order is put up for delivery to a school, the stock that has been shipped out is deducted on an inventory control card. Once that item reaches a certain pre-determined "low," there is an indicator put on the card that reorder should be made. If the stock gets low well in advance of the normal reorder point on the purchasing calendar, a decision must be made as to the importance of the item. If it isn't too important, and if its use can be restricted or rationed, the reorder is held for the annual reorder date. Obviously, an item that is used daily in classroom instruction would be reordered promptly. Williams has found that most suppliers will fill these spot orders at the price established in the original contract. **End**

SUPPLY PURCHASING CALENDAR 1959-1960 (dates tentative)

Bids Out Date	Classification of Items	Bids Close Date	Bid Awards Date
February—2	A. Instructional supplies—classroom	February—13	February—18
February—9	B. Instructional supplies—art	February—20	February—25
January—26	C. Instructional supplies—vocational	February—6	February—11
February—9	D. Non-instructional supplies—office	February—20	February—25
March—9	E. Furniture—classroom and instructional	March—20	March—27
August—3	F. Custodial supplies—cleaning	August—14	August—19
August—3	G. Custodial supplies—building	August—14	August—19



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How your school district can



High school students from 43 states are living and studying abroad this year on American Field Service's student-exchange plan. In this tape-recorded interview, the director general of AFS explains exactly how the student exchanges work.

■ ■ ■ Something new was added to American Field Service's student exchange program, just three years ago, which promises to be the greatest educational bargain ever made available to an American high school student. Here's what happened: Hitherto, foreign students came to this country to live with an American family and study in an American high school for a 10-month period. In return, American students could be sent abroad for a two-month summer interlude. Now, AFS is sending American youngsters, in their senior year, to more than a dozen different countries where they'll live with a compatible family for almost six months and attend a local high school.

The program isn't just for "rich kids." A great deal of the expense is borne by the host community—simply because the citizens want an American child in their midst—and the \$525 "fee" that sends the child abroad is most often provided by money-raising efforts on the part of the American high school student body, rather than the child's parents.

In an effort to nail down some of the details of AFS's new plan, two SCHOOL MANAGEMENT editors recently interviewed Mr. Stephen Gallatti, director general of the American Field Service. The interview was intended to uncover the "unanswered" questions that crop up in the mind of any schoolman—or parent—after he has examined the bare

send a student abroad



facts of the program itself. Here's the story:

Q. *Mr. Galatti, you have three separate programs. Before we discuss the newest one, let's see if we can get a capsule description of each, starting with the largest—foreign students coming to the United States.*

A. That's our basic program. This year, approximately 1,500 students from 46 countries have come to the United States for the first time to live with an American family, study in an American school and socialize with American children. Each community that accepts one of these children—and we often send more

than one to a given town—raises \$650 in order to sponsor him or her.

Q. What kind of children are selected?

A. First of all, most of them are between 16 and 18 years of age. They are all able to speak English, passably well, if not fluently. And they've been carefully screened abroad, for personal qualities as well as academic ones.

Q. Is the school district itself expected to put up the \$650?

A. No. The district is asked to waive tuition. The money is usually raised by contributions in the community and by local service clubs. In many communities—and we prefer this—the student body raises the funds.

That, to us, is the best method because it brings the whole school into the program. Incidentally, it costs at least \$1,000 to bring the average AFS student here. He, or his community, makes up the difference, with some help from us.

Q. Let's come back to that program later. How is the two months' summer program in which American children go abroad, operated?

A. A candidate must be a member of the junior class in his high school, be at least 16 years old, and have an excellent academic record with two years of any foreign language. He or she goes abroad for six to seven weeks as a "son" or "daughter" of the family with which he



"... it's important to emphasize that this is not a tour [but] an opportunity to live with a foreign family, share in its daily life..."

lives. The cost is \$525. Incidentally, we will only send children from a school that has been host to a foreign student. I think it's important to emphasize that this is not a tour. It's an opportunity to live with a foreign family, share in its daily life and usual summer activities, learn a language and—at the same time—help build a real understanding of America in the minds of the people contacted.

Q. What about the new program where American children study abroad?

A. The cost of the school program is also \$525. In this case, however, the American student has the opportunity of entering into the school life of the host country for approximately five months. This program is only three years old so we are moving slowly. Thus far, it's working out very well.

Q. Does the \$525 cover everything?

A. Only two things are omitted—spending money while abroad and travel to and from the United States or Canadian port. Neither of these costs need to be excessive. So far as spending money is concerned, we insist that students do not take money in excess of \$5 per week. Excessive spending destroys the good relations the child is sent abroad to create.

Q. Just how big a job is it for the superintendent, or his staff, when they want the district to participate in any one of the AFS exchange programs?

A. There is practically no work for the superintendent or anyone else in the school. In fact, so far as the school is concerned, there is no more paperwork than sending a student's application to college. The school board must pass a resolution waiving tuition for a foreign student. Sending students abroad is equally simple.

Q. What exactly is the procedure?

A. The superintendent writes to us and asks for a copy of the steps that should be taken on either of the three plans, (see box, page 82). Let's assume a community wants to be host to a foreign student. The next step is to form a local committee which includes a member of the school staff—possibly the high school principal—and members of two or three local service clubs or just plain interested people. There should be a woman in the community on the committee. The committee has two jobs. One is to find a home for the student and the other is to raise \$650. After that, the school people are no longer involved in details.

Q. At what time of year does this step usually take place?

A. The ideal time to start is in the fall. We try to have all details completed by March 1st. The visiting student arrives in August and stays until the following June.

Q. Does American Field Service help the local committee obtain a volunteer host family for the visiting student?

A. We provide a full pamphlet on the type of family that we have found has been successful. The committee selects several candidates, then submits information on one, two or three families for our approval.

Q. Does the committee have a say in the selection of the visiting student?

A. No. The members can say they'd rather have a student from a special country if they want to, but we believe the success of the program is in matching the individual student to the individual home. So, you see, we must have the home first in order to match the student to it. We are really careful in this matching process. Of course, we submit our student-home choice to the community for approval before notifying the student of the name and address of his host family.

Q. In that process, would you try to find a family of Swedish descent for a child from Sweden?

A. Definitely not. You must remember the intent of this program. This is an American experience for the student. We want him to be able to return to his native country with the true story of life in America. Too often people tend to preserve the customs of their origin for as much as two or three generations. That legislates against this truly American experience I mentioned, particularly when a family originated in the same country as the child. In cases of religion, we prefer to match them if we can. This isn't always done, however. At least



**Walk together,
talk together, o
ye peoples of the
earth; then and
only then, shall
we have peace.**

—Sanskrit

What is the American Field Service?

The American Field Service is a private, non-profit, educational organization, whose purpose is the furthering of understanding and good-will among the peoples of the world. It carries out this purpose by bringing teenage students from abroad to study in American high schools and preparatory schools and to live with families in American communities for a year. AFS also sends American teenagers abroad to live with families and attend school for two to five months.

The American Field Service was founded in 1914 as a volunteer ambulance corps and served with the Allied forces in both World War I and World War II. Its 4,000 volunteer members carried over a million casualties. The AFS peacetime program of international exchange on the teenage level was founded in 1947; the summer program in 1950 and the school program in 1957.

50% of our students come from Catholic countries and we do not have the same proportion of Catholic homes to send them to. Also, we have all religions: Mohammedans, for example. We have found that it is not necessary to match religion.

Q. Do you try to match students with a family that has a child of the same age group and sex?

A. Yes. This is the ideal situation. We like to have teenagers in the home so that the visitor will be able to participate in the normal social life of an American community.

Q. Can the American family reject the visitor, for any reason, before he or she is actually assigned to them?

A. Yes. A student is never assigned until the family has accepted the papers we have submitted on him. They may feel that the child would not fit into their family because of his interests, or his religion, or something like that. But we generally know our community and what it will accept and what it won't accept, so we can minimize this problem.

Q. Do any American Field Service representatives investigate the home that will be host?

A. We feel that the local committee is the one to do the investigating. It gives us all the information. Occa-

sionally we feel unable to accept the host family. It's very infrequent. Our reason is generally that the family lives too far away from the center of town, or because we feel a particular student should have other children his own age in the home.

Q. Does the school ever reject a child—for academic reasons, for example?

A. Occasionally a school has felt that a particular student was too old for the program. They tell us that they think a boy or girl is too advanced academically. This is very rare. I'd like to emphasize that we are very exacting in our selection of candidates in all three programs. There is no use in bringing a boy or

girl into the United States unless he has been very carefully selected, not only for his own character, but for his ability to be a future leader in his country. American Field Service personnel overseas do this investigating.

Q. Before we go into the two programs in which American children are sent overseas, we might cover the very real responsibility that is assumed by a host family for a child it takes in. What about sickness or injury?

A. Generally speaking, the American Field Service takes the responsibility for the medical expenses of its students incurred while in the United States. Expenses of this nature are

"The prime purpose of all three of our programs is to see that America is well represented to the world."





paid out of an insurance fund created by the allocation of a certain dollar amount per student. Therefore, since they are paid from AFS funds, we have often been successful in our request that doctors keep their charges to a minimum. I should add that we also provide the visiting children with spending money—\$12 a month.

Q. In many communities that would be too little, wouldn't it?

A. That's right. The student can, however, earn some spending money through baby sitting or mowing lawns or things like that. We encourage them to do a little of that because it gives them an idea of what America is like. We do not allow them to work more than a certain number of hours a week and we prefer that they do not have steady jobs because that can obstruct the social life which is part of the reason for their being here.

Q. Under practical circumstances, Mr. Galatti, I imagine the host family finds it has an expense other than room and board.

A. Unquestionably. Clothing crops up, for example, and I think the family must be prepared to have some modest extra expenses. But this need not be a drain on the family. The committee in the town is also aware of that and will help the family out—especially with clothing.

Q. Does the American school have any difficulty fitting a student into the curriculum, especially since

"I wish more people would grasp the significance of the part they can play in international relations with this program."

they've often finished high school or its equivalent?

A. Each country varies tremendously in its preparation of children. Children from Germany, Sweden, and the other Scandinavian countries haven't necessarily finished high school. Children from France or Holland, where they've already been admitted to the university, can usually find four or five courses here that would stimulate them, since we have a tremendous number of elective courses in American schools. In the American high school they are expected to rank as a senior, though they may take junior courses in American literature, or even take another language.

Q. And they all speak adequate English to handle a school situation?

A. Well, that, again, depends very much on the country. The Scandinavian coming here will probably speak English perfectly the minute he arrives. Children from the Far East—the Japanese and Indonesians—might have a problem for

the first two months of school. You must be patient with them. But they're very bright children to begin with. These children make a tremendous contribution to the whole school program, most educators have found, and language is seldom a barrier. We believe that no school should take a student unless the student council, or an equivalent organization within the school, is deeply interested. We want the student body to be aware of this stranger in its midst—to help him learn about America and to learn from him.

Q. For a district to be able to send an American child abroad, it must first be a host to a foreign student. Could that be a simultaneous operation?

A. No. Let me explain it this way: We send students abroad at the end of their junior year. A school would have to have had a student during the previous year to send him abroad on the summer program or the school program. In other words, a community with a foreign student who came in the fall would be eligible to send one of their own students

Puzzle: Which is the American student?



The one you can't see. Nancy Cummings (back to camera) enjoys a meal with the Hubers, a German family in Garmisch-Partenkirchen, Bavaria.

the following summer. The foreign student arrives in August.

Q. Are their fewer host homes abroad than there are available in the United States?

A. So far, that's been the experience. For that reason we are very selective in the Americans we send. An eligible school district can send one student on the summer program but more on the school program if they qualify.

Q. Could you handle more foreign students in this country?

A. Very definitely. That's very close to my heart because we should have, in this country, 5,000 students instead of 1,500. It's so important to the future of our country and to the world and I know there are more than 1,500 American homes willing to have these children. It's a problem communicating the value of the program to the schools.

Q. Is the two-month summer program simply a visitation to a foreign country and an opportunity to live with a foreign family?

A. Yes, but occasionally they even go to school. For instance, in Germany the schools are still open for two weeks when the Americans arrive. And most countries abroad have short summer holidays. So the American boys and girls attend schools as guests of the school.

Q. What do you require of an American child in the way of language ability?

A. We require two years of a language, not necessarily the language of the country being visited. The important thing is not that they will have a knowledge of the language they are going to use, but that they will understand what a language is about and can learn when they are there. Some of them pick up a tremendous amount of language during the two-month period. It works a little differently on the longer school program. The student has an opportunity to study the language before he goes, sometimes for several months. We also have a month, three weeks at least, of an intensive language course as soon as the student arrives in the country he's visiting. We arrange to have him there a month before school opens.

Q. Do you look for homes over there

DOES IT WORK?



Here's what foreign students say about America

FROM GERMANY "I'm president of a group of young people here working for the better understanding between the German teen-agers and the young Americans who came over here as dependents with the U.S. Forces . . . Right after our return, we AFSers here gave five talks for the different high schools telling them about our experience in the States. Being one year in the U.S. as an 'American among Americans,' I think I learned to understand the Americans and their way of doing things."

FROM NORWAY "The picture I carried back overseas was not without bad spots, this I admit, but it was a true picture. We knew and know that we were among a fine and friendly people, and that these are our friends. Because we had ourselves been Americans, we knew what they want—peace in the world."

FROM ALGERIA "America made me discover I was just a kid like millions of others. Ever since, I have been treating all people, young and what European society calls 'inferior' with the same outlook: friendliness and comprehension. From my own point of view, I certainly hope to do my best to bring American youngsters to Algeria and send young Algerians to your country."

FROM HOLLAND "I have been able to inform people in Holland by means of broadcasting of my experiences in the U.S.A. Many Dutch people do have a wrong idea of American people and their way of life, as well as many Americans thinking that in Holland all people walk on wooden shoes . . . I could tell that the U.S.A. is not only a country of goldrush people but that women as well as men have to work hard for their family."

FROM ITALY "In my year in the States, I have corrected many wrong opinions I had about America and Americans which I got out of movies and GI's. . . . On return from U.S. I have tried to make the most people as possible a part of my experience. I have been interviewed from newspapers. I was received from the mayor of the town, too. Next summer I'll guest an American student."

FROM GERMANY "I've shown my American slides to about 3,000 persons now, with the effect that all of them saw at least another aspect of the New World, and that many of them even had to give up some of their prejudices against America just as I did when I was holding your so generous scholarship. In my possession there are about 900 slides which are arranged in six lectures, each of them covering two hours. Why do I write all this? Because I want you to know that those \$144 of pocket money that you spent on me are still benefited by."

How to start an AFS program in your community

The American Field Service publishes several excellent booklets covering various aspects of its programs. These include:

How to sponsor a foreign student

Youth can bridge the gap

This explains the "Americans abroad" program

Your student and you

A guide for the family which plays host to a foreign student.

Through the year

An orientation manual for foreign students

Handbook on selection for the summer program

Notes on the AFS school program

Copies of these booklets, as well as answers to specific questions, can be obtained by writing directly to Stephen Galatti, American Field Service, 113 E. 30th St., New York City, 16.

where there are English-speaking members of the family?

A. We ask that one member of the family speak English. Fortunately, we get some homes where the English is not too good and that is very good for the student. I would like to put students into homes without anyone who speaks English, but I think we might be risking something.

Q. If it only costs \$525 to send an American child on either of your two programs, where does the money come from for any travel or other expenses over there?

A. I think I mentioned that this amount is raised by his school or by his family. I should say over 50% is probably compensated through the school or the local committee. Nothing else is needed because we raise money abroad for certain events like receptions and entertainment. For example, I got a letter today from Pakistan telling that they'd given a dance there—the hotel had provided the orchestra and the place free—to raise money so they could take their American students on a little tour of three or four days to see something of Pakistan. They raised 3,900 rupees. That's being done all over, everywhere. In Japan, a newspaper furnishes a great deal of money. In Italy, there are various industries that provide funds. In Germany, the town of Bremen always votes through its senate \$3,000 a year to bring American students together for an orientation program.

Q. Can an American student select the country he or she wants to visit?

A. No. We must do that because of the problem of matching students to

families and conditions in the country.

Q. You said you were very selective in your choice of Americans to go abroad. What criteria do you use?

A. We are very demanding, particularly for the school program. We require, first, a very high scholastic standard, and, second, a great aptitude for foreign languages. Third, we want a very all-round type of boy or girl—someone who would represent us well. The prime purpose of all three of our programs is to see that America is well represented to the rest of the world—to break down the stereotype of the American.

Q. What happens to a boy or girl scholastically who starts his senior year abroad? Isn't he going to miss some of the subjects he would have normally taken in the American school? Physics, for example.

A. That's right. It does require some thoughtful planning on the part of his or her principal. But I might say that we have found that all the boys and girls who have been in this program have gotten into their first choice college when they apply.

Q. On the six-month school program, when does an American child leave and return?

A. Let's use Holland as an example. He arrives there in August and returns in January. We feel he should be there during the holiday period but he must be back in time to start the second semester here.

Q. Taking a look at the broader meaning of this whole program, Mr. Galatti, would you say that you feel—as an American—that it's

more important for us to send students abroad or to have foreign students come here?

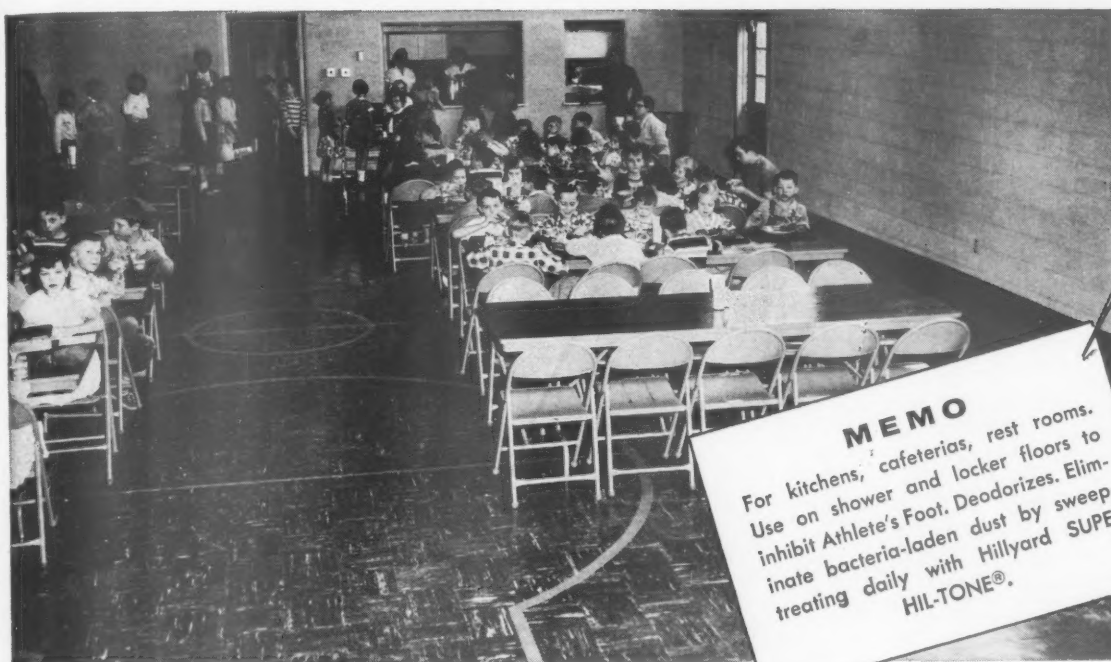
A. From an American point of view, it's more important to have the foreign students come here. I think the strength of their experience here, the strength of their going back home and really realizing what the truth about America is and the friendship we feel for foreign nations, is more important to America than sending a summer student abroad. But that's important too. We want to show that our youth are good youth.

Q. Do you find that the children who visit here have a rather distorted view of the United States before they arrive?

A. Very definitely. Not the people from the Scandinavian countries, but it is very true in France and Belgium and countries of the Far East, to a degree, (see box, page 81.) I wish more people would grasp the significance of the part they can play in international relations with this program. This is a chance for the ordinary individual to really participate in a program that's of critical importance to our nation. Our government recognizes it—that's why the State Department provides about \$60,000 to assist us. And there are other selfish reasons. We know that foreign students stimulate something "extra" in the school they attend. They can talk to classes, to assemblies, bring them something new. **End**



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► Town residents building do-it-yourself school

Residents of the town of Washington, Vt., have pitched in over the last six months to build themselves a grade school at a savings of some \$35,000.

When the town's only school burned down last March, Board Member Paul Vermette, a building contractor, volunteered to draw up plans for a new building. He and five other townsmen then went to work on the project full-time. Twenty other Washingtonians are devoting nights and weekends to the project. They hope to have the school ready for occupancy by Christmas.

State officials had estimated that the new school would cost \$114,000. With do-it-yourself labor on the job, townspeople now feel that the total cost will be just \$79,000.

► Student bus patrol aids transport safety

Maintaining pupil safety and discipline on school buses is a requirement for all school bus drivers. But to concentrate on safely maneuvering a loaded 60-passenger bus is enough of a job for one man. As a result, interior safety and decorum usually suffer.

In Nanuet, N. Y., the administration has come up with a solution to the problem, that works. There, a student bus patrol has been formed to maintain safety on the buses.

For the last five years two older children on each bus run have acted as patrol members. They are issued yellow safety patrol badges and are on duty for the whole year. Members are selected by previous members on a hand-down basis, with the approval of Administrative Assistant H. John Stevens, who heads the program.

The student patrol member is the driver's assistant. He aids in the use of the emergency door if this should become necessary. He reports to the driver any damage done to the bus by one of the riders and watches to see that students don't forget books and lunches when disembarking.

Patrol members also must check on such unsafe practices as standing in the bus, putting hands and heads out of windows, horseplay in the bus, etc. They report chronic offenders directly

to the building principal but, of course, have no authority to take any disciplinary action themselves.

Patrol members are rewarded at the end of each school year with a one-day trip into New York City, an early dismissal and a certificate of merit. Says Administrator Stevens "The bus patrol has not only made the bus trips safer, it has given students a wonderful opportunity to accept and carry out responsibility."

First day blues

For some, people, school should never start. Take the case of Seven-year old Ted Jensen in Laramie, Wyo. Called to the blackboard by his teacher, he failed to budge. Investigation showed he had caught his little finger in a hole in his desk and couldn't get it out. It took police 15 minutes to extricate him.

He was lucky compared to Earl Jenkins, five, of South Bend, Ind. Earl got lost on his way home from his first day in school and was found several hours later in Niles, Mich., five miles from home.

Earl had a legitimate complaint, however. As he told his mother, here he was, after a full day of school, and "I still couldn't read those signs along the road."

Or, as some critics would say, "They don't teach the way they used to."

► Experts call for driver training after dark

Driver training courses in the United States have markedly cut down on traffic accidents involving teen-age drivers, but experts have noted a major weakness in the courses offered by most schools. They do not give any training under difficult conditions met by drivers almost every day.

According to Dr. A. R. Lauer, director of the driving research laboratory of Iowa State College, schools should put student drivers behind the wheel in difficult situations. For example, he suggests that winter driving, night driving and driving on high speed roads

should be required parts of any driver training course.

Only one school, in Keokuk, Iowa, is known to give high school students behind-the-wheel practice after dark, but statistics compiled by the National Safety Council show that there are almost three times as many fatal accidents, in relation to miles driven, during after dark hours as during daylight.

The Association of Casualty and Surety Companies reported recently that 12,039 high schools, about 61% of the nation's total, offered driver training courses last year. Enrollment topped 1.2 million, about 67% of students reaching driving age.

Enrollment in high school driver training courses will reach an all-time high this year, with about 500 schools joining the list of those offering courses.

► Custodial training demanded for schools

A seminar of school maintenance authorities in New York and New Jersey has called upon architects to help orientate custodians in new buildings.

Members of the seminar group, called together by Architect Frederic G. Wiedersum, agreed that the day was long past when untrained custodians could simply stoke furnaces, fix windows, lock doors and keep driveways clear of snow.

Recommending that greater attention should be paid to training school custodians, the seminar members also suggested that the following steps be taken when a new school is to be opened:

- Provide operating guide books for all new schools.
- Hire custodians on an orientation basis before the contractor and architect have finished their work.
- Have other school authorities attend meetings to orientate them to the operating procedures.
- Train teachers in the use of equipment, especially in their own rooms.

The seminar also endorsed the idea of using code systems through the school for pipes and electrical lines. Hot water lines would be marked one way, cold another. Valves, too, should be plainly marked so that they can be readily identified in an emergency.

Great emphasis was also put on the question of adequate facilities for the

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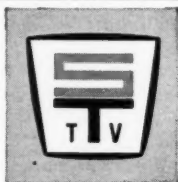
- Pamphlet GS6 General Science
- Pamphlet B8R2 Biology
- Pamphlet HSC-7 Chemistry
- Pamphlet P-12 (54 pgs.) Physics
- Pamphlet DMW Physics Workbook Experiments
- Pamphlet DMB Demonstration of Physical Laws

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custodial force. It was suggested that utility rooms be large enough to service the entire floor on which they are located, without difficulty. Built-in racks for brooms and mops were called for.

Finally the seminar participants suggested that a private room with desks and chairs should be provided for the custodial force to lend dignity to the job and encourage better working morale.

A novel suggestion

Superintendent Odes Sapp of Fowler, Kan., has come up with what may be a unique suggestion for many of today's school children and their parents: Try studying when you ordinarily watch TV.

In a letter to parents, he wrote: "I would like to ask for your help. With our modern gadgets, we are getting too much competition.

"Could we set aside a few minutes each night for studies? If the children miss Maverick, Cheyenne or Colt 45 (on television) it still can be picked up next week. But it is a little inconvenient to pick up the missed school work the next year. How about arranging for a study hour?"

High school social clubs banned by board

Columbus, Ohio, has joined the growing list of school districts that have outlawed so-called high school social clubs. Over the protests of a group of parents and students, the school board insisted that it had the authority to regulate the after-hours activities of the students, insofar as those activities affect the schools.

Although parents of the club members claimed the social clubs were strictly after-school affairs, witnesses before the board told of special cafeteria tables put aside for members only and cited other instances of in-school activity.

Although Columbus school authorities had long been opposed to the social clubs, they had declined to initiate action against them until parents of other students took the lead. That happened last spring and the board then took steps to make the clubs illegal.

Present members will be allowed to remain in the clubs until they graduate. New members may not be signed up without facing expulsion from school and students will be asked to sign a non-membership pledge.



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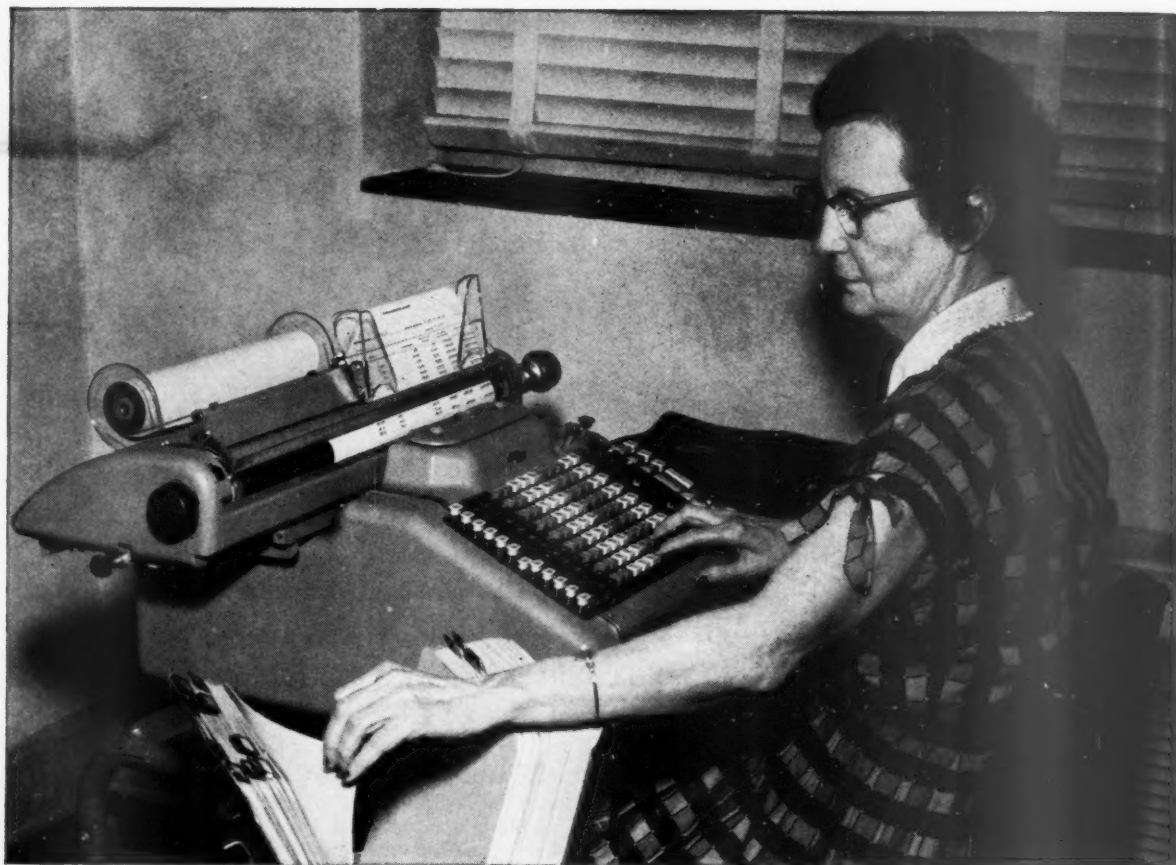
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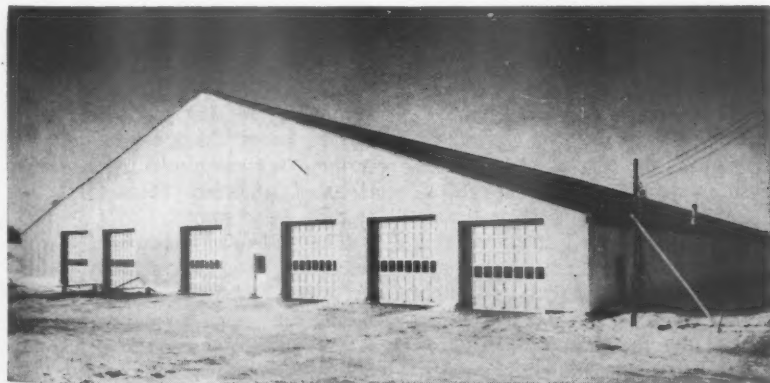
POLE BUILDINGS

provide low-cost bus shelter

In Battle Creek, Mich., the schools have turned to an old farm tradition to inexpensively shelter their transportation fleet.



Twenty-six buses and 24 pieces of miscellaneous equipment are comfortably stored in this pole building. Notice how rafters have been attached directly to wooden poles which are sunk in ground, treated, and serve as building foundation.



Buses are protected against Michigan's usual dosage of snow, wind and rain. Eleven large overhead doors make entering and leaving no problem at all.

■ ■ ■ School buses, unlike children, do not need a special environment for their shelters. But they do need a roof and four walls to protect them from wind, snow and rain.

In Battle Creek, Mich., the schools have turned to an old American farm custom to shelter their 26 buses and 24 pieces of miscellaneous equipment. They have constructed a pole building.

The 25,000-square foot building, which has room for an 18- by 64-foot repair area, as well as the storage facilities, was constructed for less than \$2 per square foot. It has 11 overhead doors, two pass doors, 22 plastic-panel skylights, an asphalt floor and aluminum roofing and siding.

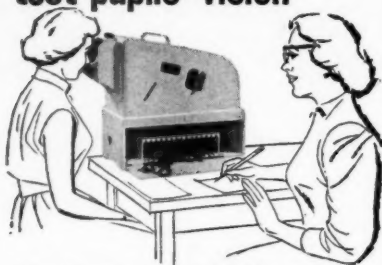
With pole building construction there is no concrete foundation. Instead, a network of poles is set deep in the ground and these serve as both framing and foundation. The wooden poles are treated with a preservative to protect them against fungus and termites.

Rafters are fastened directly to the poles, producing a building with superior wind resistance. The aluminum siding and roofing are nailed directly to the framework. There are no sills or joists and savings can be realized from reduced sawing and fitting.

Because of large initial investments in school buses, and the problem of accelerated depreciation when buses are stored outdoors, this economical solution to the problem of shelter has been a very happy one for the Battle Creek schools. It permits an inexpensive storage building to protect a major investment. **End**

For more information on pole construction, circle number 838 on the Reader Service Card.

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What teachers think

continued from page 50

comprehensive high schools Conant examined to draw up his widely acclaimed academic inventory.)

Interpreting Suffern findings

"We don't view the criticism by our staff of the inadequacy of providing for individual pupil differences as a grave fault with out training," said Rounds. "Certainly Dr. Conant didn't find we lacked this vital ingredient of good education. We believe teachers of quality will always complain that they cannot cope with individual differences just because they are so quick to recognize the difficulties involved. We think this criticism is an asset of our system, not a liability."

Columbia's Wynn agrees. "Morale studies of educators aren't 'do-it-yourself' devices to be evaluated in some basement schoolroom. Survey results often can be misinterpreted or misused unless they are analyzed properly by people trained in the field."

"Even though my communications channel with my staff is in sound working order throughout the year," Rounds summed up, "I found the survey generally stimulating and valuable."

The public informed

Replies drawn from sprawling Los Angeles—as well as from school districts ranging in size from Maumee, Ohio (56 teachers), to the state system in Utah (6,750 teachers and principals)—confirm the preliminary research of Gerhard Lang, psychologist at Fairleigh Dickinson University, who has been studying teacher motives. Few teachers would want to do anything else but teach youngsters—possibly, Lang suggests, to fulfill their own psychological needs for a socially acceptable job, fellowship, love of children and intellectual stimulation.

This was the case among Seattle, Wash., teachers surveyed by SRA in 1957. Dedicated to their teaching responsibilities, they ranked crowded classrooms and inadequate training of talented children high on the list of the system's problem areas. Only the matter of pay required more attention, they submitted.

The administrators knew that

teachers were underpaid and classrooms were bulging, but they were hamstrung by a rigid state tax structure. In Seattle, the findings of the opinion inventory were aired to the public, and, as a result, public pressure led to tax reforms and to better schools.

The Seattle superintendent broadcast the teachers' opinions on local TV, and the newspapers picked up the survey results, too. Once the increased tax levy put more money in the school till to increase pay scales, the superintendent, following recommendations for better communications with his staff, held closed-circuit TV meetings with all teachers and staff members and issued a newsletter to disseminate policy statements.

The Seattle situation points up how attitude surveys often may be used to goad lethargic citizens into action.

The Seattle board also learned from the poll (and was shocked to find out) that 20% of the city's teachers were nearing retirement within two years. Seattle had been growing since World War II. School population had doubled. There were too few teachers as it was. Finding new ones to replace those who would soon leave, posed a real problem. But without the study, Seattle educators confess, they would not have been aware of the problem for another year or so. By then it might have been too late to recruit more teachers, even though salaries had been raised to sums comparable with those in other West Coast cities.

Here, then, is another by-product of attitude research: an inventory of the assets and liabilities, strengths and weaknesses of a system. In addition, it provides a means of comparing a local situation with national conditions (see box on page 50). It is sometimes helpful for local school administrators to know where teacher morale in their district stands in relation to teachers attitudes throughout the rest of the country.

The diagnosis of school ills is never an easy task. Today, when experienced teachers are at a premium, and when pirating of teachers is an endemic practice, it's a wise board and administration that watches for unrest and dissatisfaction.

End

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Does your district need a business manager? *continued from page 46*

will have a surplus of cash. It is my job to anticipate when we will need money and to borrow it as cheaply as possible on short-term notes. On the other hand, we invest our surplus cash and it is my responsibility to see to it that it is invested properly. Our district realizes an income of about \$40,000 per year on investment of surplus funds. This is a sizable amount that would not be realized—or could be lost—if investments were not handled carefully.

COLLIER: Here's a little incident, but I think it perhaps serves to demonstrate better than anything else the way in which an alert business manager can help a district. For years we have been busing our students to and from school. Two

months of the year, our buses are laid up, but we pay insurance on them during that period. Mr. Hertwig came to the board last summer and pointed out that we were paying insurance for a risk we weren't taking. He suggested that we cancel our bus insurance for the two months. As a result, the district saved \$600 it would not have saved without a business manager.

PHILLIPS: You mention insurance on buses. This year, thanks to work done by our business office, we aren't running our own buses. We're contracting for transportation service.

Last spring, when the board was considering the 1959-60 budget, Mr. Hertwig brought in a detailed report that showed exactly how

much money it was costing to run our own buses, how much it would cost to contract for the service—he had taken preliminary bids—and what the difference would mean to the community. As a result, the district is saving \$29,000 this year on its transportation.

COLLIER: One other point ought to be mentioned here. Every district must take bids on items costing some set amount. But taking bids alone will not guarantee the district's getting the best quality for the lowest price. That depends on the ability of someone to draw up specifications properly, to know when it is best to put the item out to bid, and to know how to handle the bids when they are received from the various suppliers.

Question 4

How should a business manager, a superintendent and a school board divide their various responsibilities in the business end of operating the schools, or is this done on a catch-as-catch-can basis?

PHILLIPS: In this particular district, Mr. Hertwig is in general charge of the operation and maintenance of the buildings, of the insurance program, the purchasing program, the cafeteria program and transportation. He collects and presents the information that goes into making up a budget, he sees to it that our accounting is properly managed, that we maintain a proper inventory. He is the district's purchasing agent. Now in all of these areas he has general overall charge. This does not mean that ultimate responsibility does not remain in my hands and those of the board, but we do not have to worry about them, we do not have to get involved in the details.

COLLIER: That's right. In relation to the board, the business manager supplies us with information we need—whether we request it or he sees the need for it independently. The board will decide the district's insurance goals, but it will be up to Mr. Hertwig to purchase and admin-

ister our policies within the broad outlines laid down by the board.

HERTWIG: I think my most important duty is to keep the board and the superintendent always informed. I present the facts upon which they make their decisions. For example, at any time during the year I can tell the board exactly how much money we have spent, how much we have committed ourselves to spend, and how much we still have left to commit.

COLLIER: I think you might describe the business manager's job as a questioning one. He will look at requests for money and he will question them.

Q. In areas of text books, or other curriculum-related purchasing, isn't this more in the superintendent's province?

HERTWIG: Let's say a request comes in for a complete set of geometry texts and I know from my records that we purchased a complete set last year. I will challenge the high

school principal on this and he will take it up with the teacher. If they can convince me that they need those books—perhaps they are supplementary texts—fine. I'll okay the purchase and the superintendent won't be involved at all. Or perhaps my questioning will remind them that they had just made a similar purchase and don't really need the books. Then they'll withdraw the request and again the superintendent won't be involved.

Q. Suppose they still say they need them, and you say they don't. Who has the last word?

HERTWIG: When that happens, and it has, I go to the superintendent, tell him what's happened and say, "You decide." I abide by his decision. He is the administrative leader in this district. I am a member of his team.

PHILLIPS: I think the question you are getting at here is, "Does the business manager run the school's curriculum?" The answer, of course,



teacher



school superintendent



school physician



school nurse

are you in this group?

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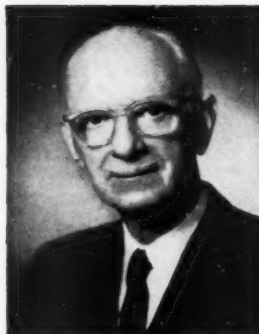
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AN EVALUATION OF RESEARCH ON THE

Teaching Effectiveness of the AETNA DRIVOTRAINER

By Herbert J. Stack, Ph.D.



Two important organizations went on record in 1958 regarding use of driving simulators such as the Aetna Drivotrainer.

The first of these was reported at the National Conference on Driver Education held at Purdue University:

"In recognition of simulators, the value of which has been established by research, simulated driving experience can be used in lieu of half of the recommended minimum, in a ratio of 4 to 1. Decision for approval of any simulator should be the responsibility of the individual State Department of Education."

A second is from the Driver Education Section of the National Safety Council.

"The National Safety Council supports and encourages the use of laboratory equipment to simulate behind-the-wheel driver experience in high school

driver education courses. Also, the Council encourages continued research as to the manner in which such devices can be most effectively used in the teaching of driver education."

These statements were developed as a result of three research studies that had been completed on the value of the Drivotrainer. The writer has had occasion to review these studies in the preparation of an article for *Traffic Safety - Quarterly Research Review* of the National Safety Council. The first of these studies was carried on by the research and safety supervisors of the Los Angeles Schools. A second followed much the same design as the Los Angeles study and was submitted by Louis I. Bernoff in partial fulfillment of the Ed.D. degree at the University of Southern California. A third was conducted by the research and driver education departments of Iowa State Teachers College.

The purpose of these studies was to determine the amount of learning that took place in the Drivotrainer program as compared with the traditional practice driving program. Learning in the Los Angeles and Bernoff studies was measured in terms of relative gains in skills, knowledge and attitudes. In these studies the experimental or Drivotrainer group was given 16 class periods on the "trainer," 3 hours of practice driving, and 6 of observation. The control group was given 6 periods of practice driving and 12 of observation. Students were tested before and after instruction with skill and knowledge tests and attitude scales. The Iowa study, however, was confined to a comparison of the driving skills of the two groups.

CONCLUSIONS

Skills

1. In all three studies no significant differences were found in the post-instruction driving performance tests of the experimental and control groups. Students taught on the Drivotrainer were just as skillful as those taught by conventional methods.

Knowledge

2. The Los Angeles and Bernoff studies reported that the difference between the two groups in gains in knowledge was not significant.

Attitudes

3. In the same studies it was reported that after training the difference in attitudes in the two groups was not significant.

Costs

4. It was also pointed out in the three studies that in the Drivotrainer program, the costs would be considerably lower, the amount depending on the number of cars in the installation.

The statements of policy by the National Conference on Driver Education and the National Safety Council, therefore, warrant careful consideration.

In recent years, the costs of driver education have been increasing. It is therefore important that driver educators take steps to try out types of programs that may produce better results, at substantially lower costs.



ONE TEACHER TRAINS 15 STUDENTS AT A TIME in this modern Drivotrainer classroom. Each "car" is equipped with the instruments and controls of a real automobile. The system employs motion pictures to simulate actual driving conditions.

Development of the Drivotrainer was financed by the Aetna Casualty and Surety Company as a contribution to education, and highway safety. Aetna Casualty has no financial interest in the sale of Drivotrainer equipment but continues its public service support of the program through production of Drivotrainer films and other teaching aids, assisting in teacher training, and supplying an educational liaison service to Drivotrainer users.

Drivotrainer equipment is manufactured, sold and serviced by the Automatic Voting Machine Division of the Rockwell Manufacturing Company, Jamestown, New York.

For further data on the Aetna Drivotrainer, please write to:



INFORMATION AND EDUCATION DEPT.

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"A first-class teacher won't necessarily make a first-class business manager."

is "no." He is our expert on business affairs. He happens also to be a top-notch educator. But Mr. Hertwig's function in this district is a business function. In any area where he has general supervision, he turns to me or to our assistant superintendent for curriculum, for guidance in educational matters.

COLLIER: In large part, the effectiveness of a district's business manager must be measured in terms of, one, improvement in operating efficiency and, two, the extent to which he relieves the superintendent of time-consuming duties that detract

from his real role as the community's educational leader.

PHILLIPS: You have to break his duties down into two parts. One as administrator of certain operating units of the district—maintenance, cafeteria, transportation—anything that is generally of a business nature, and two, as a budget officer for the superintendent, in which role he must compile all of the basic statistical data concerning expenditures for the district this year, last year and for the years in the future. It is a big job, one that takes a capable full-time man to be done properly.

PHILLIPS



Question 5

Who should be hired as a school business manager—an educator, a businessman, an accountant—or doesn't it matter?

HERTWIG: I came up to the position through educational lines, but with considerable business background. My personal belief, possibly tainted because of my own experience, is that the business manager ought to be an educator. So much of the purchasing that we do, so much of our relations with other professional people, requires that background. Many of the things that a non-educator

might disapprove on a purchase order, or not understand, I feel that I can more fully appreciate.

COLLIER: I want to disagree somewhat with that. I think Mr. Hertwig's viewpoint is colored somewhat by the fact that he is *not* just an educator. Usually, when a man comes up to the position through the educational hierarchy, that's all he is, an educator. From the point of view of our consulting work, one of the biggest mistakes we find made is the assumption that an educator can learn good business practice faster than a good businessman can learn the needs and desires of the educators.

It is never the role of the business manager to disapprove out-of-hand a request for a purchase. Rather, it's a questioning role in terms of availability of funds and the basic way in which the budget was prepared in the beginning. If he questions and obtains the proper justification, he's filling his role. However, it's right that he question and he's more likely to do so if he has a full appreciation of good business methods.

HERTWIG: I would agree with that. If you can get an educator with some business background, then I think you've got the man.

PHILLIPS: I think that a capable man, with certain basic training, can develop into almost any position to which he is basically fitted. I have worked very successfully with a business manager who had absolutely no training as an educator. He came up through accounting and when he got into educational business he elected, of his own free will, not on request, to study rather deeply in educational philosophy and educational business management. He felt that this enriched his ability to serve his district. On the other hand, I feel that Mr. Hertwig would be far less equipped to handle his job if he had not had bonafide business experience outside the educational world.

I will hazard this opinion: The qualities that go toward making a first-class teacher are not necessarily the qualities that will make a first-class business manager. I think that a successful businessman can transfer successfully to the business management of a school system more easily than the successful teacher can become the successful manager of a school system.

COLLIER: I can only add that as consultants to many school districts, my firm has found too many examples that bear out this point.

"It is a mistake to assume that an educator can learn business faster than a businessman can learn education."

COLLIER



Question 6

What rank in the administration should the business manager of a district hold, to work most effectively?

PHILLIPS: It has been shown that school district business managers operate under some 37 different titles. They range from the secretary to the superintendent—who also answers the phone and writes out tardy slips—to associate superintendent, or even, sometimes, superintendent. In our district here is how it works. As superintendent, I am the responsible executive officer of the board. If I am absent from the district for any reason, the assistant superintendent assumes my responsibilities. Although the board has not specifically so stated, if both of us were out of the district, Mr. Hertwig, as assistant to the superintendent, is the one to whom I would turn to perform my functions.

Q. Would Mr. Hertwig be given that responsibility if he did not have the educational background and superintendent's license?

PHILLIPS: The fact that he has a superintendent's license would not influence my judgement at all. The quality of the man to assume an emergency responsibility is what counts. Let's be practical. I know of a district with a superintendent and business manager and no assistant superintendent. When the superintendent goes out of the district,

authority in that case is passed down to the high school principal.

COLLIER: It seems to me that when a school district reaches the stage of development that it needs an assistant superintendent to assist in the educational areas, it needs an assistant superintendent, or an assistant to the superintendent, to handle business affairs. He should be on a more or less comparable level of administrative supervision.

Certainly in a district this size (7,600 students) he must be of a stature and capability to assume the responsibility inherent in that position. But no amount of provision for administrative positions is going to offset a weak or incapable individual in the position. This board has, I think, accepted the philosophy that it's not going to save its money by short changing itself on administrative help. This is one place where we stand to gain the most by *not* trying to pare down or economize.

Q. Mr. Hertwig, do you feel that your job as business manager would be impaired if you held a rank of lesser stature in the administration of the Syosset schools?

HERTWIG: I see the organization of a school district as a pyramid, with

the superintendent on top, branching downward in two directions. It goes down on one side with the educational and personnel functions and on the other with the business organization. You have two separate interlocking organizations both reporting to the superintendent. Each must have its head. I don't think that it necessarily matters whether the head of one side is higher or lower than the head of the other, as long as the responsibilities are kept clear. I think it would be unfortunate if the head of the business side were on a par with the third, fourth or fifth in command on the educational side, or the other way around.

COLLIER: We recently completed a study of a large school district in which we recommended an organizational structure that had an associate superintendent and six assistant superintendents, one of whom was for business affairs. Now we would conceive of this assistant superintendent as being of equal stature with the other five, but if the superintendent and associate superintendent were out of the district, he is not the man to whom responsibility would be assigned, because the other five are his equals and they are educators.



Question 7

Doesn't the presence of a business manager in a district challenge the leadership of the superintendent and at the same time usurp some of the functions of the board?

PHILLIPS: I don't believe so. Any superintendent should be happy with assistance. It keeps the superintendent more alive and alert to his own job. The superintendent who isn't smart enough to recognize ideas of educational merit that come from close associates shouldn't be a superintendent. If there is a threat to the inner spirit of the superintendent

when he's got a first-class assistant in any field, then this is an indication of insecurity in the superintendent himself.

Q. Should the business manager be responsible directly to the board or should he report to the superintendent?

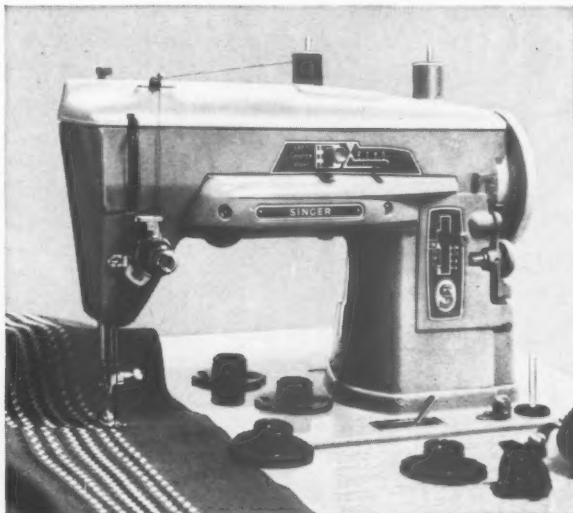
PHILLIPS: I personally would not

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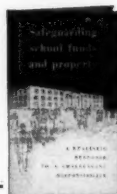


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accept a position in a district where the business manager reported directly to the board. I do not believe in this two-headed kind of leadership.

COLLIER: You get into trouble when you have a man functioning in the role of a business manager, reporting directly to the board rather than to the superintendent.

Q. Mr. Hertwig, what pose should a good business manager take with respect to the superintendent and the board? Should he put up his fists and fight or should he accept his role as a subordinate?

HERTWIG: I think you're getting into personal philosophies here. My own is that I will fight behind closed doors to the nail, but once I open the door and step out, I will support the decision that was made, be it mine or the superintendent's. If I can't win the superintendent over to my point of view, he should win me over to his.

PHILLIPS: I would agree with that. I don't want a business manager who doesn't have ideas of his own. If he doesn't take the initiative with respect to recommending changes, improvements, and approaches to problems of a business nature, then I don't think he's a business manager. I expect him to come up with ideas, not merely wait for the superintendent to pontificate and then say, "I agree." Now, any time that two individuals are thinking independently, there are bound to be differences of opinion. I see nothing wrong with that as long as each man respects the other.

I think that the superintendent has to make two kinds of decisions. He must make specific decisions on specific problems and he must decide in what areas he should reserve to himself the final decision and in what areas he should delegate the decision-making. I freely delegate to Mr. Hertwig many areas of decision-making that many of my colleagues reserve for themselves.

Q. Should members of the board go directly to the business manager when they have questions concerning the business operation of the district?

COLLIER: We would hope that, unless it was something pretty urgent, the board member would go to the superintendent first. However, in

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actual practice there are many times when a question is asked of the business manager directly. For example, he is present at all board meetings. A question comes up concerning finances. That question is not directed at anyone specifically, but I would expect that the business manager would answer it. I don't think we'd have to ask the superintendent first.

PHILLIPS: Quite frankly, in such a situation, if the question were asked of me, I wouldn't know the answer because having a business manager I don't concern myself with certain details. I think the board members would be perfectly correct in addressing questions on business matters directly to the business manager.

COLLIER: I think, however, that if a question came up outside of the board meeting, I would hesitate to call on the business manager for an opinion without first having the courtesy to mention it to the superintendent. Now obviously, if I simply wanted to check a figure that had been brought up at a meeting, I wouldn't bother to tell the superin-

tendent that I was calling the business manager. But I can conceive of times when it would be proper to tell the superintendent first, before addressing a question directly to the business manager.

PHILLIPS: You would not call him up directly from your office and ask a question. You'd probably ask the

question in the open board meeting.

HERTWIG: The sort of thing that might cause embarrassment would be if a board member came to me and said, "Look, I'd like to look at your records on such and so, or give me this information." I would prefer that the superintendent was consulted first.

Question 8

Where should a board of education and a superintendent look when they want to hire a business manager?

PHILLIPS: There are many directions in which one looks. One would be to institutions that provide professional training for school business management. There are many of these. Another would be by scrutinizing candidates who would send in their resumes when it was announced that the job was open.

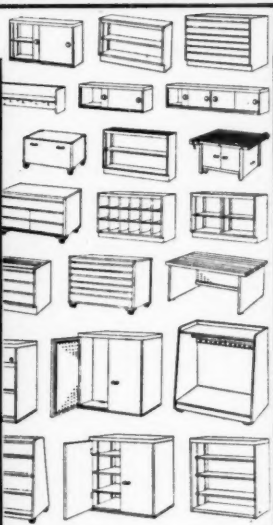
HERTWIG: I think one prime source of good candidates would be the Association of School Business offi-

cials of the United States and Canada and its local affiliates.

PHILLIPS: Agreed. That's probably the first place I'd look.

COLLIER: I don't think, either, that we'd close our eyes to a businessman who wanted to get into educational business. I think our main interest would be in finding the right man for the job. We would do whatever was necessary to find him. **End**

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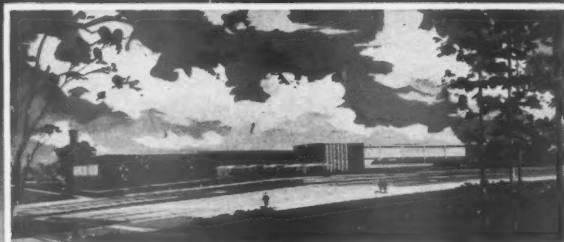
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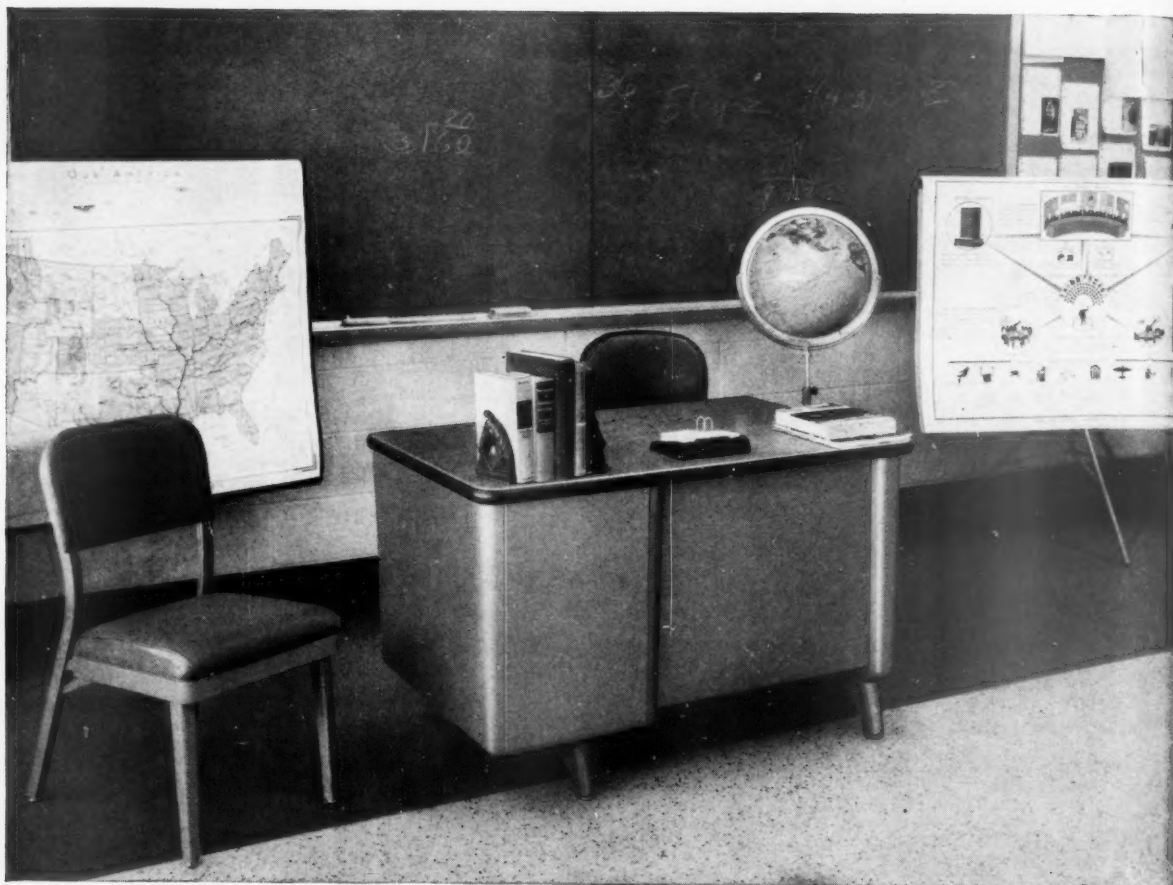


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continued from page 9

aging information. All reagents carry catalog numbers for fast, sure ordering.

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Maintenance. Building management and maintenance personnel can quickly determine whether washroom cleaning and servicing are being performed in an economical amount of time by consulting the new dial indicator for that purpose, now available from the Scott Paper Co. One side of the Scott Fact Finder disc indicates the average time it takes to perform various janitorial duties in a washroom, as well as the recommended frequency for cleaning operations. The disc's second side indicates the average time it should take to fill the various types of towel cabinets. A separate window indicates the time needed for a consumer to extract a towel from each dispenser.

For a free copy of this dial, circle number 895 on the Reader Service Card.

Pool supplies. A complete range of swimwear, pool supplies, equipment and accessories are described and illustrated in a two-color catalog issued by Ocean Pool Supply Co., Inc. Items mentioned run the gamut from swim suits, caps and robes through stop watches, water sports equipment and life preservers, to diving boards, aqua lungs and pool maintenance equipment.

For a free copy of this catalog, circle number 869 on the Reader Service Card.

School calendar. The 1959-60 edition of Master Lock Co.'s Sports Calendar provides space after each date for recording future athletic events and other school activities. Corresponding to the regular school calendar, from September 1959 through June, 1960, the two-color calendar has protective metal strips on the top and bottom with double eyelets for easy hanging.

For a free copy of this calendar, circle number 883 on the Reader Service Card.

Television. A four-page folder issued by Meilink Steel Safe Co., pictures the company's large screen television projector and new remote projection unit. Complete electrical and mechanical specifications are given and optional accessories listed.

For a free copy of this folder, circle number 901 on the Reader Service Card.

OCTOBER 1959

SM

PRESS RELEASES

News from the business firms serving your schools

Simplified tape recorder

Classroom tape recording that is simple and fool-proof is offered in a new tape deck introduced by Califone Corp. The deck of the Simplex Recorder is fully enclosed and tamper-proof. The tape cannot be removed by the student and only two controls are



visible to him: play-record lever and rewind lever. A signaling device warns that the end of the tape is approaching, flashing an "end of tape" message several times. If disregarded, the signal remains on and the reels stop without damaging or disengaging the tape.

The student listens through his own headphones to a master tape recording, responds into his microphone and hears himself instantly. He can record the master and his own voice at his own booth, then may play back the entire recording to compare his own speech with the voice of the master recording.

For more information, circle number 860 on the Reader Service Card.

Nylon post binders

Unburst or burst control punched forms can be filed quickly and easily with the nylon post binders now available from Uarco, Inc. Pages held in the binders are completely exposed for easy reference, permitting the entire form to be filled with typed matter. This results in fewer pages for reports and a consequent savings in forms cost.

The lack of protruding parts on the outside of covers to interfere with neat, flat stacking results in less storage space than with conventional post

binders. The flexible posts lock with one motion, are as easily released for the addition of new pages and are available in a wide range of sizes with permanent or flexible covers.

For more information, circle number 858 on the Reader Service Card.

Novel coloring material

Swiss "coloring sticks" featuring concentrated pigmentation, soluble qualities, fade-proof tones and general all-around versatility are being introduced in the United States through the Reliance Pen & Pencil Corp.

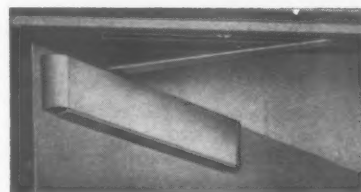
Manufactured in Geneva, Switzerland, by the Caran D'Ache Co., Neo-color works perfectly on all papers, parchments and canvas and can be used with equal success on metal foil, wood, leather and other hard-to-color materials. It never powders or crumbles, yet dissolves easily in turpentine for clean and easy oil painting effects. In addition it is excellent for scratch drawings since the colors, though they blend perfectly, will not mix.

For more information, circle number 854 on the Reader Service Card.

Versatile interior door closer

A straight, one-piece arm which functions on a traveling spindle to relieve leverage stress on butts and door frames highlights a new door-installed interior door closer produced by the Oscar C. Rixson Co. The arm is completely concealed when the door is closed and frictionless bearings at all major load and wearing points assure durability.

Specifications are reduced to a mere designation of "Multi-check (mortised)" or "Multi-check (surface)" for any interior door. The same device may



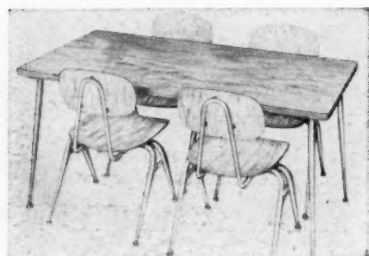
be mounted on the push or pull side of either a left or right hand door. The unit may be site adjusted to any of seven hold-open positions from 85 to 130 degrees. Dual valve controls provide independently adjustable closing and latching speeds.

For more information, circle number 861 on the Reader Service Card.

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Versatile tables

To the newly-announced 3/R line of schoolroom desks and chairs, the Irwin Seating Co. has added a line of tables in matching design. The styling



is neat and clean with graceful, swaged tubular legs and maximum comfort and knee room through the use of welded support sections instead of braces. Table tops feature full plywood cores with durable Textolite surfaces.

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For more information, circle number 856 on the Reader Service Card.

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Vocabulary builder

An interesting new teaching aid for vocabulary building, Picture Words for Beginners, is now being offered by the Milton Bradley Co. By associating basic picture words with their respective objects, children in grades one through three learn to spell and sharpen their powers of seeing and hearing. In addition, the teaching aid provides children with a variety of games they can play.

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Professional tape duplicator

Utilizing the common, horizontal mandrel principle, Model 10 MRI tape duplicator, introduced by Magnetic Recording Industries, makes three high-speed duplicate copies si-

multaneously and can produce up to 150 perfect copies in a single eight-hour day.

The standard can be easily loaded with up to 3,600 feet of tape at one time. Operating at 30 ips, Model 10 can duplicate a 1,200-foot tape in 7½ minutes and duplication can be performed forward or backward with no lengthening problems, making re-winding unnecessary. Requiring only three square feet of installation space, the budget-priced duplicator features mechanical simplicity and complete accessibility of all parts.

For more information, circle number 846 on the Reader Service Card.

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Blade stops plywood splinters

A new Delta plywood-cutting blade from Rockwell Mfg. Co. eliminates chipping, shattering or splintering when cutting plywood and other veneer-faced wood. The blade, seven inches in diameter with 200 small teeth around its edge and a ⅝-inch arbor hole, is made for eight, nine and 10-inch saws.

For more information, circle number 864 on the Reader Service Card.

■ ■ ■

Interference-free lighting panels

A new low brightness lens panel developed by Corning Glass Works shields out radio interference radiated from fluorescent lamps while transmitting the light waves. A thin, transparent, electrically-conductive film, permanently fired onto the back surface of the glass, intercepts the interference which is grounded by a ¼-inch wide silver strip fired onto the film around the periphery of the glass. Made of heat-resistant borosilicate glass, the panel resists heat shock and corrosion. The prismatic design has been optically engineered for accurate control of direct and reflected light.

For more information, circle number 841 on the Reader Service Card.

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Portable fire extinguishers

One-hand operation, fast and easy recharge and trouble-free maintenance are claimed for the Ansul Chemical Co.'s new line of hand portable dry chemical fire extinguishers. The Sentry "Energized" extinguishers, in 10, 20 and 30-pound dry chemical capacities, are based on the stored pressure principle and are offered in red or white for maximum visibility. Their slender silhouettes and hose positions—ex-



tended upward rather than outward—make mounting easier on narrow structural beams with little or no overhang.

For more information, circle number 845 on the Reader Service Card.

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Vacuum cleaner line

Nine vacuum cleaners comprise the line of machines just introduced by Multi-Clean Products, Inc. Three series are included with motors ranging from ½ hp to 1½ hp and each cleaner is available with seven, 12 and 17-gallon tanks. The vacuums feature pleated, washable filters of quick-drying synthetic fiber that won't rot or mildew and provide more than 1,400 square inches of filter area.

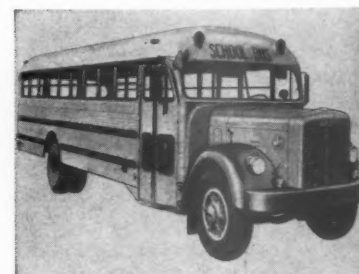
The new Imperial line is finished in either heavy gauge stainless steel or standard seamless steel tank with baked-on enamel finish. All tanks have non-clogging drains and 1½-inch intakes which can be converted to two inches if desired.

For more information, circle number 849 on the Reader Service Card.

■ ■ ■

Medium-weight bus line

A new series of school buses with capacities for 48, 54, 60 and 66 passengers has been announced by The White Motor Co. Designed to bring heavy-duty quality into a medium-weight line, the new buses—White 2000BA Series—come in wheelbases of 187, continued on page 108





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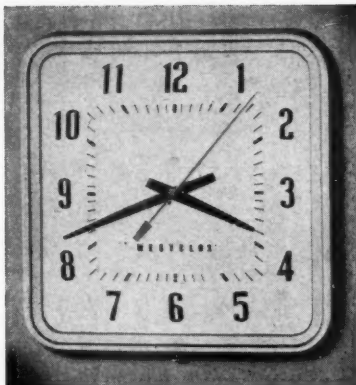
Removal of office grime, grease, carbon smudge, duplicating and printing inks without water is now possible with Creamec, a new hand cleaner introduced by the Roytype Department of Royal McBee Corp. Delicately scented, the product does away with frequent hand-washings with harsh soaps and cleansers and follow-up applications of skin cream or lotion, since it contains both lanolin and silicones to make hands soft and smooth.

For more information, circle number 852 on the Reader Service Card.

■ ■ ■

Square electric wall clock

A 10-inch square electric wall clock in a desert tan finish, to complement the wide variety of colors now popular in school offices, is now available from Westclox. The new clock features a handy re-set knob, thin, all-metal case, flush mounting, a sweep



second hand and a signal interruption device.

For more information, circle number 842 on the Reader Service Card.

■ ■ ■

New decorative laminate

Soft subdued grains and rich coloring highlight Honduras Mahogany, a new General Electric Textolite decorative laminate patterned after the grains used in fine mahogany furniture. Suitable for furniture and certain vertical paneling applications requiring a combination of realistic wood grain beauty and durability, the new addition to the company's line comes in both satin

finish and the newly-announced textured Textolite. Both are immediately available in cross-grain form; availability in the post-forming grade will be announced later.

For more information, circle number 851 on the Reader Service Card.

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New storage possibilities

One complete Erecta-Shelf unit installed upside-down, on top of another, with a simple new means of support, can extend Metropolitan Wire Goods Corp.'s Erecta-Shelf to a new height of nearly 12-feet. The steel rod shelving, when installed as suggested, can ease warehousing and stock problems without employing more horizontal space.

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Portable serving unit

The model APT series portable transportation and serving unit from Lincoln Mfg. Co. Inc., accommodates any depth 12-inch by 20-inch pans with lids or trays. Individual compartments can be heated or cooled and the unit provides combined hot and cold food capacity for 200 persons.

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A slanted horizontal installation of LUMISHADE fixed sun LOUVERS solved this school's sun problems. Combines beauty and shade without darkening; eliminates drapes and venetian blinds. May be installed horizontally or vertically, awning-type or flush mounted.

Available through Glass and Store Front Trade plus selected specialty firms; offers advantage of local responsibility for sales, installation, and service. Contact your LUMISHADE dealer or write:

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Now... Choose from 3 basic Wayne gymnasium seating systems to meet your budget

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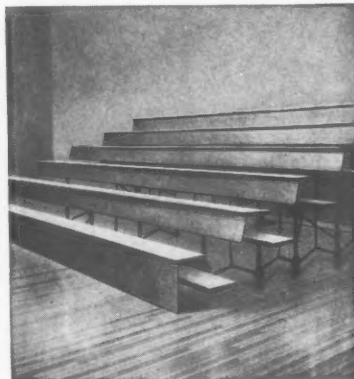
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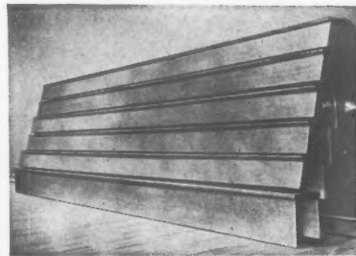
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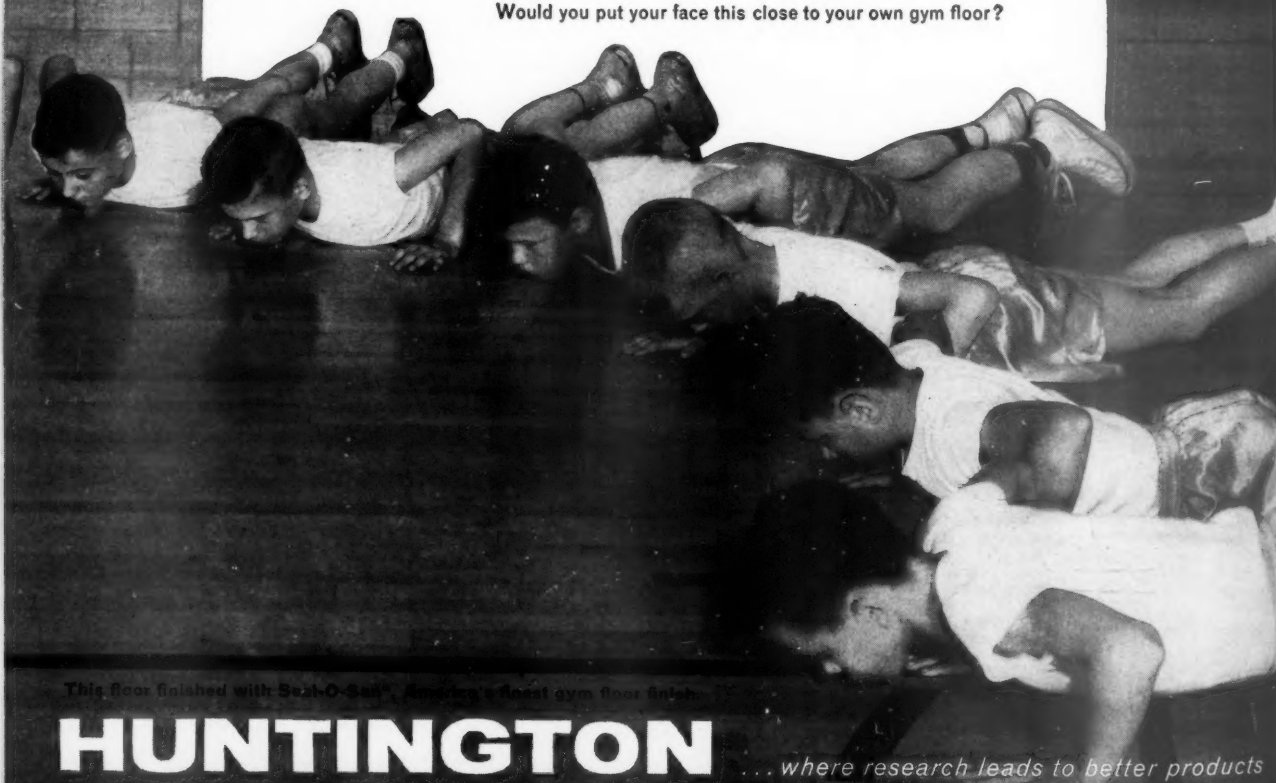
Floors are germ traps. Disease bacteria are constantly settling to the floor where they multiply rapidly, *unless inhibited*. You can do much to reduce this health hazard with the dust mops now used to "clean" your floors, simply by spraying Huntolene Antiseptic Dust Control on the mopheads. Huntolene inhibits germ growth, slows or stops their multiplication, even protects the maintenance man by killing bacteria in the mop.

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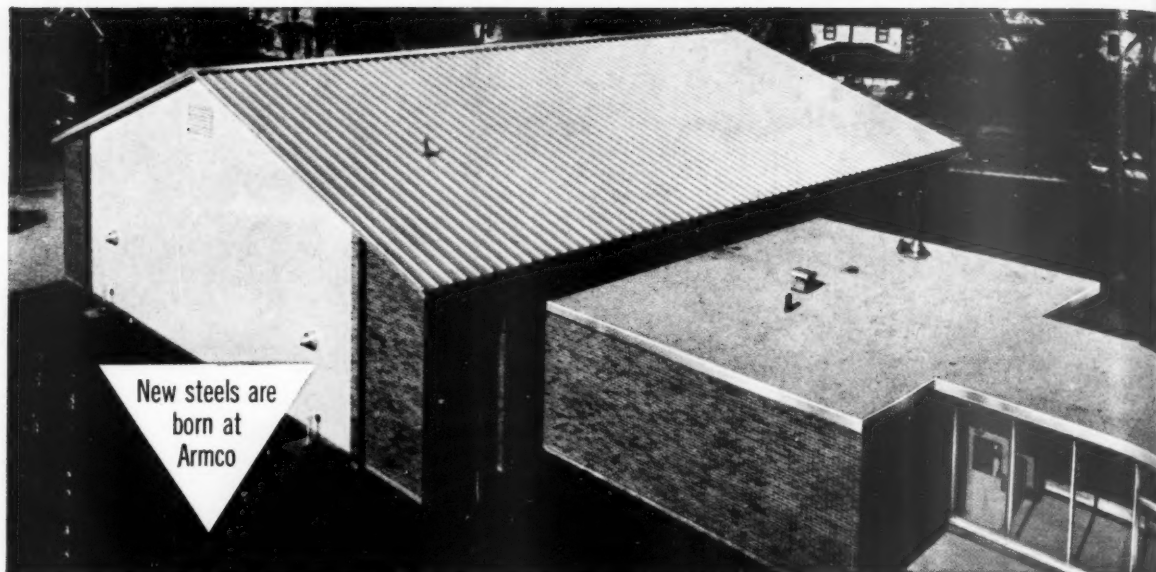
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